



Safety Data Sheets

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SAFETY DATA SHEET



ORANGE SOLVENT

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: **AP128**

Version No: **2.3**

Issue Date: **07/07/2021**

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	ORANGE SOLVENT
Product code	AP128
Pack sizes	5L & 15L
Proper shipping name	DIPENTENE

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Carpet cleaning solvent booster
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Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	02 4966 5516

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	5
GHS Classification	Aspiration Hazard Category 1, Flammable Liquid Category 3, SkinCorrosion/Irritation Category 2, Skin Sensitizer Category 1, STOT - SE (Narcosis) Category 3, Serious Eye Damage Category 2
	Classification drawn from HCIS and ECHA C&L Inventory

Label elements

Hazard pictograms	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye protection.
P261	Avoid breathing mist or vapours.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P241	Use explosion-proof and intrinsically safe electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P301+P310+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
P302+P352+P363+P333+P313	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs; get medical advice / attention.
P305+P351+P338+P363+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice / attention.
P304+P312+P340	IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333+P313	If skin irritation or rash occurs, Get medical advice/attention
P370+P378	In case of fire, use alcohol resistant foam or normal protein foam for extinction.
P391	Collect spillage.

Precautionary statement(s) Storage

P403+P405+P235+P233	Store locked up, in a well-ventilated place. Keep cool. Keep container tightly closed.
P410	Protect from sunlight.

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local government regulations
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures.

Mixtures

CAS No	%[weight]	Name
5989-27-5	30-60	d-limonene
64742-48-9	30-60	naphtha petroleum, isoparaffin, hydrotreated
9016-45-9	<10	nonylphenol ethoxylates
64-17-5	<10	ethanol

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water for at least 15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical advice; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	Immediately seek medical advice. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Avoid giving milk or oils. Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.
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Special hazards arising from the substrate or mixture.

Fire incompatibilities	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools. Do not approach containers suspected to be hot.
Fire/Explosion Hazard	Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Moderate explosion hazard when exposed to heat or flame. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon monoxide (CO), carbon dioxide (CO2), other pyrolysis products typical of burning organic material Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.
HAZCHEM	•3Y

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Remove all ignition sources. NO SMOKING Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wipe up spill using paper towel or equivalent and dispose of safely.
Major Spills	Immediately remove all possible sources of ignition. NO SMOKING. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labeled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle. CARE: Absorbent materials wetted with occluded oil must be moistened with water as they may auto-oxidize, become self-heating and ignite.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically Always release caps or seals slowly to ensure slow dissipation of vapours DO NOT allow clothing wet with material to stay in contact with skin
Other information	Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access. Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances. Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems. Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors. Keep adsorbents for leaks and spills readily available. Protect containers against physical damage and check regularly for leaks.

Conditions for safe storage, including any incompatibilities.

Suitable container	Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks.
Storage incompatibility	Reacts with strong oxidisers and may explode or combust. Is incompatible with strong acids , including acidic clays, peroxides, halogens, vinyl chloride and iodine pentafluoride

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)


INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	naphtha petroleum, heavy, hydrotreated	Oil mist, refined mineral	5 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	ethanol, denatured	Ethyl alcohol	1880 mg/m3 / 1000 ppm	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
d-limonene	Limonene, d-	20 ppm	20 ppm	160 ppm
naphtha petroleum, isoparaffin, hydrotreated	Naphtha, hydrotreated heavy; (Isopar H-rev 2)	171 ppm	171 ppm	570 ppm
nonylphenol, ethoxylated	Glycols, polyethylene, mono(p-nonylphenol) ether; (Nonoxynol-9)	9.9 mg/m3	110 mg/m3	300 mg/m3
ethanol, denatured	Ethyl alcohol	Not Available	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Always maintain adequate ventilation. In most circumstances natural ventilation systems are adequate. If ventilation is not adequate, then the use of a local exhaust system is recommended
Personal protection	
Eye and face protection	Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves. Nitrile, PVA or Viton are recommended for this application.
Body protection	See Other protection below
Other protection	Not usually required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear colourless liquid		
Physical state	Liquid	Relative density (Water = 1)	0.94
Melting point / freezing point (°C)	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Available
Initial boiling point and boiling range (°C)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Odour	Strong citrus	Viscosity (cSt)	Not Available
pH (as supplied)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Decomposition temperature	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials.Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) Accidental ingestion of the material may be damaging to the health of the individual. Isoparaffinic hydrocarbons cause temporary lethargy, weakness, incoordination and diarrhoea.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Toxicological effects of ingredients

d-limonene	Acute toxicity	Oral LD50 (rat) 4400 mg/kg Dermal LD50 (rabbit) >5000 mg/kg
	Skin corrosion/irritation	Causes skin irritation
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	May cause an allergic skin reaction
	Germ cell mutagenicity	No data available
	Carcinogenicity	No data available
	Reproductive toxicity	No data available
	STOT (single exposure)	No data available
	STOT (repeated exposure)	No data available
	Aspiration toxicity	May be fatal if swallowed and enters airways
naphtha petroleum, hydrotreated heavy	Acute toxicity	Oral LD50 (rat) >5000 mg/kg Dermal LD50 (rabbit) >5000 mg/kg Inhalation LC50 (rat) >5000 mg/m3 (8hr)
	Skin corrosion/irritation	Mildly irritating to skin with prolonged exposure (Based on test data for structurally similar materials)
	Eye damage/irritation	May cause mild, short-lasting discomfort to eyes (Based on test data for structurally similar materials)
	Respiratory/skin sensitization	Not expected to be a respiratory or skin sensitiser. (Based on test data for structurally similar materials)
	Germ cell mutagenicity	Not expected to be a germ cell mutagen (Based on test data for structurally similar materials)
	Carcinogenicity	Not expected to cause cancer (Based on test data for structurally similar materials)
	Reproductive toxicity	Not expected to be a reproductive toxicant (Based on test data for structurally similar materials)
	STOT (single exposure)	Not expected to cause organ damage from a single exposure. Negligible hazard at ambient/normal handling temperatures. Vapour/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects including death.
	STOT (repeated exposure)	Not expected to cause organ damage from prolonged or repeated exposure (Based on test data for structurally similar materials). Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis
	Aspiration toxicity	May be fatal if swallowed and enters airways (Based on physicochemical properties of the material). Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
nonylphenol ethoxylated	Acute toxicity	Oral LD50 (mouse) 4290 mg/kg
	Skin corrosion/irritation	moderate to severe irritation.
	Eye damage/irritation	moderate to severe irritation
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	Not genotoxic
	Carcinogenicity	No Data Available
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
ethanol	Acute toxicity	Oral LD50 (mouse) 3450 mg/kg Inhalation LC50 (rat) 2000 ppm/10hrs
	Skin corrosion/irritation	Irritating to skin. Prolonged contact may result in drying and defatting of the skin, rash and dermatitis.
	Eye damage/irritation	Irritating to eyes. Exposure may result in lacrimation, irritation, pain and redness
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	No Data Available
	Carcinogenicity	No Data Available
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	Chronic ingestion may result in cirrhosis of the liver
	Aspiration toxicity	No Data Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high watermark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. DO NOT discharge into sewer or waterways.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites

33.6	Endpoint	Test Duration (hr)	Species	Value
d-limonene	LC50	96	Fish	0/L.46mg
	EC50	48	Crustacea	0.307mg/L
	NOEC	504	Crustacea	0.05mg/
naphtha petroleum, heavy, hydrotreated	LC50	96	Fish	4.1mg/L
	EC50	48	Crustacea	4.5mg/L
	EC50	72	Algae or other aquatic plants	>1-mg/L
	NOEL	72	Algae or other aquatic plants	0.1mg/L
nonylphenol ethoxylates	LC50	48	Crustacea	1.43mg/L
	EC50	72	Algae or other aquatic plants	2.5mg/L
ethanol, denatured	LC50	96	Fish	42-mg/L
	EC50	48	Crustacea	2-mg/L
	EC50	96	Algae or other aquatic plants	-8.358-26.503mg/L
	EC10	168	Algae or other aquatic plants	1.91-mg/L
	NOEC	2016	Fish	0.000375-mg/L

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
d-limonene	HIGH	HIGH

Bio accumulative potential

Ingredient	Bioaccumulation
d-limonene	HIGH (LogKOW = 4.8275)

Mobility in soil

Ingredient	Mobility
d-limonene	LOW (KOC = 1324)



SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Containers may still present a chemical hazard/ danger when empty. Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	
HAZCHEM	•3Y

Land transport (ADG)

UN number	2052				
Packing group	III				
UN proper shipping name	DIPENTENE				
Environmental hazard	No relevant data				
Transport hazard class(es)	<table><tr><td>Class</td><td>3</td></tr><tr><td>Sub risk</td><td>Not Applicable</td></tr></table>	Class	3	Sub risk	Not Applicable
Class	3				
Sub risk	Not Applicable				
Special precautions for user	<table><tr><td>Special provisions</td><td>Not applicable</td></tr><tr><td>Limited Quantities</td><td>5L</td></tr></table>	Special provisions	Not applicable	Limited Quantities	5L
Special provisions	Not applicable				
Limited Quantities	5L				

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

D-LIMONENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

NAPHTHA PETROLEUM, HEAVY, HYDROTREATED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

NONYLPHENOL ETHOXYLATES IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List

ETHANOL, DENATURED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	01/07/2021
Initial Date	18/11/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	19/10/2020	Sections 2,3,4,5,6,8,11,12,14,15,16 have been updated or corrected
2.2	01/07/2021	Section 16
2.3	07/07/2021	Sections 2, 3, 8, 11, 12, 15

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



OXYBOOST PLUS

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP446.01

Version No: 2.1

Issue date: 08/03/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	OXYBOOST PLUS
Product code	AP446.01
Pack sizes	1kg

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Oxygen powered destainer and booster
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Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	6
GHS Classification	Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, Oxidizing Solid Category 2, STOT (Single Exposure) Category 3 <i>Classification drawn from HCIS and ECHA C&L Inventory.</i>

Label elements

Hazard Pictograms	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation.
AUH066	Repeated exposure may cause skin dryness and cracking

Precautionary statement(s) Prevention

P210	Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P221	Take any precaution to avoid mixing with combustibles / organic material.
P280	Wear eye protection.
P220	Keep / Store away from clothing / organic material / combustible materials.
P270	Do not eat, drink or smoke when using this product.
P261	Avoid breathing dust
P271	Use only outdoors or in a well-ventilated area.
P264	Wash exposed skin thoroughly after handling.

Precautionary statement(s) Response

P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352+P362+P332+P313	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice / attention.
P301+P330+P312	IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.
P304+P340+P312	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.
P370+P378	In case of fire: Use water spray/fog for extinction.

Precautionary statement(s) Storage

P405+P403+P233	Store locked up in a well-ventilated place. Keep container tightly closed.
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Precautionary statement(s) Disposal

P501	Dispose of contents / container in accordance with local regulations
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
15630-89-4	>60	<u>sodium percarbonate</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Obtain medical advice / attention without delay. Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If required, transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. For advice, contact a Poisons Information Centre or a doctor. Urgent hospital treatment is likely to be needed. In the meantime, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

Hydrogen peroxide at moderate concentrations (5% or more) is a strong oxidant.

Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	<p>NOTE: Chemical extinguishing agents may accelerate decomposition. [CCINFO]</p> <p>FOR SMALL FIRE:</p> <p>Use flooding quantities of water.</p> <p>DO NOT use dry chemical, CO₂, foam or halogenated-type extinguishers.</p> <p>FOR LARGE FIRE</p> <p>Flood fire area with water from a protected position</p>
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Special hazards arising from the substrate or mixture

Fire incompatibilities	<p>Avoid storage with reducing agents.</p> <p>Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous</p>
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Advice for firefighters

Fire Fighting	<p>Alert Fire Brigade and tell them location and nature of hazard.</p> <p>May be violently or explosively reactive.</p> <p>Wear full body protective clothing with breathing apparatus.</p> <p>Prevent, by any means available, spillage from entering drains or water courses.</p> <p>Fight fire from a safe distance, with adequate cover.</p> <p>Extinguishers should be used only by trained personnel.</p> <p>Use water delivered as a fine spray to control fire and cool adjacent area.</p> <p>DO NOT approach containers suspected to be hot.</p> <p>Cool fire exposed containers with water spray from a protected location.</p> <p>If safe to do so, remove containers from path of fire.</p>
Fire/Explosion Hazard	<p>Will not burn but increases intensity of fire.</p> <p>Heating may cause expansion or decomposition leading to violent rupture of containers.</p> <p>Heat affected containers remain hazardous.</p> <p>Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition.</p> <p>May emit irritating, poisonous or corrosive fumes.</p>
HAZCHEM	1Y

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	<p>Clean up all spills immediately.</p> <p>No smoking, naked lights, ignition sources.</p> <p>Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result.</p> <p>Avoid breathing dust and all contact with skin and eyes.</p> <p>Control personal contact with the substance, by using protective equipment.</p> <p>Scoop up solid residues and seal in labelled drums for disposal.</p> <p>Flush away with copious amounts of water.</p>
Major Spills	<p>Alert Fire Brigade and tell them location and nature of hazard.</p> <p>May be violently or explosively reactive.</p> <p>Wear full body protective clothing with breathing apparatus.</p> <p>Consider evacuation (or protect in place).</p> <p>No smoking, flames or ignition sources.</p> <p>Increase ventilation.</p>
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<p>Provide adequate ventilation.</p> <p>Avoid personal contact and inhalation of dust.</p> <p>Always wear protective equipment and wash off any spillage from clothing.</p> <p>Keep material away from light, heat, flammables or combustibles.</p> <p>Keep cool, dry and away from incompatible materials.</p> <p>Avoid physical damage to containers.</p> <p>DO NOT repack or return unused portions to original containers. Withdraw only sufficient amounts for immediate use.</p> <p>Use only minimum quantity required.</p> <p>Avoid using solutions of peroxides in volatile solvents.</p>
Other information	<p>Store in original containers.</p> <p>Keep containers securely sealed as supplied.</p> <p>Store in a cool, well ventilated area.</p> <p>Keep dry.</p> <p>Store under cover and away from sunlight.</p> <p>Store away from flammable or combustible materials, debris and waste. Contact may cause fire or violent reaction.</p> <p>Store away from incompatible materials and foodstuff containers.</p>

Conditions for safe storage, including any incompatibilities.

Suitable container	DO NOT repack. Use containers supplied by manufacturer only.
Storage incompatibility	<p>This product contains hydrogen peroxide which is a powerful oxidiser</p> <p>Avoid contamination with reducing agents, acids, alkalis, organic solvents, metallic salts.</p> <p>Avoid combustible materials and liquids.</p> <p>Keep away from combustible materials such as cloths, wood and sawdust.</p> <p>Keep out of sunlight.</p>

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


No data available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium percarbonate	sodium percarbonate	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
sodium percarbonate	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	<p>Chemical goggles.</p> <p>Full face shield may be required for supplementary but never for primary protection of eyes.</p> <p>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. Lens should be removed in a clean environment only after workers have washed hands thoroughly.</p>
Skin protection	See Hand protection below
Hands/feet protection	<p>Wear chemical protective gloves, e.g. Neoprene</p> <p>Hand cream offers no protection for hydrogen peroxide and should not be used.</p>
Body protection	See Other protection below
Other protection	<p>Overalls.</p> <p>PVC Apron.</p> <p>Eyewash unit.</p> <p>Ensure there is ready access to a safety shower.</p>
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White free flowing powder		
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Physical state	Powder	Relative density (Water = 1)	Not Available
Odour	Not Available	Viscosity (cSt)	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	10.0	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Partition coefficient n-octanol / water	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable under normal handling conditions. Hazardous polymerisation will not occur. Unstable if submitted to prolonged exposure to heat
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.
Ingestion	Accidental ingestion of the material may be harmful.
Skin Contact	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

Toxicological effects of ingredients

sodium percarbonate	Acute toxicity	Oral LD50 (rat) 1034 – 2000 mg/kg Dermal LD50 (rabbit) >2000 mg/kg
	Skin corrosion/irritation	Mild irritant (Rabbit).
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	Not a skin sensitizer
	Germ cell mutagenicity	No adverse effect observed in tests conducted
	Carcinogenicity	Not a carcinogen
	Reproductive toxicity	Unlikely to be toxic to reproduction
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
sodium percarbonate	EC50	48	Crustacea	=4.9mg/L
	NOEC	48	Crustacea	=2mg/L

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
No data available		

Bio accumulative potential

Ingredient	Bioaccumulation
No data available	

Mobility in soil

Ingredient	Mobility
No data available	

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	1Y

Land transport (ADG) – NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS IN PACK SIZES OF 1KG OR LESS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

SODIUM PERCARBONATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	08/03/2021
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	08/03/2021	Sections 2, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes.

Definitions and abbreviations

PC-TWA:	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



CONQUER

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP462

Version No: EP1.4

Issue date: 08/12/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	CONQUER
Synonyms	AP462
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Multi task encapsulating carpet stain remover
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Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD (Actichem Pty Ltd)
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Fax	(02) 4966 5510
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification ^[1]	Not Applicable

Label elements

GHS label elements	Not applicable
SIGNAL WORD	NOT APPLICABLE

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

P102	Keep out of reach of children
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Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents and containers in accordance with local regulations
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

All ingredients are non-hazardous or below cut-off limits

Mixtures

CAS No	%[weight]	Name
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SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs with concentrate: Flush skin and hair with running water. Seek medical advice in event of irritation.
Inhalation	Not applicable
Ingestion	Do NOT induce vomiting. Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	There is no restriction on the type of extinguisher which may be used
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Special hazards arising from the substrate or mixture

Fire incompatibility	None known
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Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	Non-combustible.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Flush away with copious amounts of water.
Major Spills	Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle. Prevent by any means available any spillage entering a watercourse.
	Personal protective equipment advice is contained in Section 8 of this SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Wear suitable protective clothing depending on the circumstances. Do not mix with other chemicals unless expressly recommended by the manufacturer. Always store in original container.
Other information	

Conditions for safe storage, including any incompatibilities

Suitable container	Polyethylene or polypropylene container
Storage incompatibilities	Strong acids and oxidizing agents

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION


Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

Exposure controls

Appropriate engineering controls	Not required
Personal protection	
Eye and face protection	It is a good practice to wear gloves to prevent drying of the skin.
Hands/feet protection	Not applicable

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear gold yellow liquid		
Physical state	Liquid	Relative density (Water = 1)	1.0
Odour	Baby powder	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	7.5	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Mists from the product may cause irritation to the nose, throat and respiratory system with effects including: coughing and discomfort.
Ingestion	May cause irritation to the mouth, throat and stomach.
Skin Contact	No adverse effects listed.
Eye	May cause irritation.
Chronic	Extended period of contact may cause irritation in sensitive individuals.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

No data available.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bio accumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations.
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

Not Applicable

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL;	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



ACTICHEM VDS

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: **AP480.05**

Version No: 2.1

Issue date: **28/07/2021**

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	ACTICHEM VDS
Product code	AP480.05
Pack sizes	500ml & 5L
UN Proper shipping name	FLAMMABLE LIQUID, N.O.S.

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Carpet cleaning volatile dry spotter
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Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	6
GHS Classification	Aspiration Hazard Category 1, Reproductive Toxicity Category 1B, Flammable Liquid Category 3, Skin Corrosion/Irritation Category 2, Skin Sensitizer Category 1, Eye Irritation Category 2
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

Hazard pictograms	  
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SIGNAL WORD	DANGER
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Hazard statement(s)

AUH066	Repeated exposure may cause skin dryness and cracking
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H360D	May damage the unborn child

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety instructions have been read and understood.
P281	Use personal protective equipment as required
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. NO SMOKING
P233	Keep container tightly closed.
P240	Ground/Bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge
P280	Wear protective gloves and eye protection.
P264	Wash exposed skin thoroughly after handling.
P272	Contaminated clothing should not be allowed out of the workplace.
P261	Avoid breathing mist/vapour/spray.
P273	Avoid release to the environment.

Precautionary statement(s) Response

P301+P313+P330+P331	IF SWALLOWED: Immediately call a POISON CENTRE or doctor. Do NOT induce vomiting.
P303+P361+P353+P333+P313	IF ON SKIN (or hair): Remove / take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338+P337+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
P304+P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	If exposed or concerned: Get medical advice/attention.
P391	Collect spillage.
P362+P364	Take off contaminated clothing and wash it before re-use.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.

Precautionary statement(s) Storage

P403+P405+P233	Store locked up, in a well-ventilated place. Keep container tightly closed.
P410+P235	Protect from sunlight. Keep cool

Precautionary statement(s) Disposal

P501	Dispose of contents/container in compliance with local government regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures.

Mixtures

CAS No	%[weight]	Name
111-76-2	30-60	<u>ethylene glycol monobutyl ether</u>
64742-48-9.	30-60	<u>Naphtha, petroleum, hydrotreated heavy</u>
67-63-0	10-30	<u>isopropanol</u>
5989-27-5	<10	<u>d-limonene</u>
872-50-4	<10	<u>N-methyl-2-pyrrolidone</u>

SECTION 4 FIRST AID MEASURES**Description of first aid measures**

Eye Contact	If eye contact occurs Wash out immediately with fresh running water for at least 15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical advice; if pain persists or recurs seek medical attention.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.

Ingestion	<p>If swallowed do NOT induce vomiting.</p> <p>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully.</p> <p>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</p> <p>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</p> <p>Seek medical advice.</p> <p>Avoid giving milk or oils.</p> <p>Avoid giving alcohol.</p> <p>If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</p>
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SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	<p>Alcohol stable foam.</p> <p>Dry chemical powder.</p> <p>BCF (where regulations permit).</p> <p>Carbon dioxide.</p> <p>Water spray or fog - large fires only.</p>
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Special hazards arising from the substrate or mixture.

Fire incompatibility	Avoid contamination with oxidising agents i.e., nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<p>Alert Fire Brigade and tell them location and nature of hazard.</p> <p>May be violently or explosively reactive.</p> <p>Wear breathing apparatus plus protective gloves in the event of a fire.</p> <p>Prevent, by any means available, spillage from entering drains or water course.</p> <p>Consider evacuation (or protect in place).</p> <p>Fight fire from a safe distance, with adequate cover.</p> <p>If safe, switch off electrical equipment until vapour fire hazard removed.</p> <p>Use water delivered as a fine spray to control the fire and cool adjacent area.</p> <p>Avoid spraying water onto liquid pools.</p> <p>Do not approach containers suspected to be hot.</p>
Fire/Explosion Hazard	<p>Liquid and vapour are highly flammable.</p> <p>Severe fire hazard when exposed to heat, flame and/or oxidisers.</p> <p>Vapour may travel a considerable distance to source of ignition.</p> <p>Heating may cause expansion or decomposition leading to violent rupture of containers.</p> <p>Combustion products include carbon dioxide (CO₂) carbon monoxide (CO), other pyrolysis products typical of burning organic material.</p> <p>Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.</p>
HAZCHEM	·3YE

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	<p>Remove all ignition sources.</p> <p>Clean up all spills immediately.</p> <p>Avoid breathing vapours and contact with skin and eyes.</p> <p>Control personal contact with the substance, by using protective equipment.</p> <p>Mop up using paper towel or equal and dispose of safely.</p>
Major Spills	<p>Remove all possible sources of ignition. NO SMOKING.</p> <p>Increase ventilation.</p> <p>Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labeled drums and dispose of according to local government regulations.</p> <p>Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.</p>
PPE	Personal protective equipment advice is contained in Section 8 of this SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<p>Containers, even those that have been emptied, may contain explosive vapours.</p> <p>Do NOT cut, drill, grind, weld or perform similar operations on or near containers.</p> <p>Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.</p> <p>Check for bulging containers.</p> <p>Vent periodically</p> <p>Always release caps or seals slowly to ensure slow dissipation of vapours</p> <p>DO NOT allow clothing wet with material to stay in contact with skin.</p> <p>Avoid all personal contact, including inhalation.</p> <p>Wear protective clothing when risk of exposure occurs.</p> <p>Use in a well-ventilated area.</p> <p>Prevent concentration in hollows and sumps.</p> <p>DO NOT enter confined spaces until atmosphere has been checked.</p> <p>Avoid smoking, naked lights, heat or ignition sources.</p>
Other information	<p>Store in original containers in approved flame-proof area.</p> <p>Wear personal protective clothing when risk of exposure occurs.</p>

Conditions for safe storage, including any incompatibilities.

Suitable container	DO NOT use aluminium or galvanised containers Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks.
Storage incompatibility	Strong oxidisers. Strong acids and alkalis.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	96.9 mg/m ³ / 20 ppm	242 mg/m ³ / 50 ppm	Not Available	Sk
Australia Exposure Standards	naphtha, petroleum, hydrotreated heavy	Oil mist, refined mineral	5 mg/m ³	Not Available	Not Available	Not Available
Australia Exposure Standards	isopropanol	Isopropyl alcohol	983 mg/m ³ / 400 ppm	1230 mg/m ³ / 500 ppm	Not Available	Not Available
Australia Exposure Standards	N-methyl-2-pyrrolidone	1-Methyl-2-pyrrolidone	103 mg/m ³ / 25 ppm	309 mg/m ³ / 75 ppm	Not Available	Sk

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethylene glycol monobutyl ether	Butoxyethanol, 2-; (Glycol ether EB)	20 ppm	20 ppm	700 ppm
naphtha, petroleum, hydrotreated heavy	Naphtha, hydrotreated heavy; (Isopar H-rev 2)	171 ppm	171 ppm	570 ppm
isopropanol	Isopropyl alcohol	400 ppm	400 ppm	12000 ppm
d-limonene	Limonene, d-	20 ppm	20 ppm	160 ppm
N-methyl-2-pyrrolidone	Methyl 2-pyrrolidinone, 1-; (N-Methylpyrrolidone)	10 ppm	10 ppm	10 ppm

Ingredient	Original IDLH	Revised IDLH
ethylene glycol monobutyl ether	700 ppm	700 [Unch] ppm
naphtha, petroleum, hydrotreated heavy	Not Available	Not Available
isopropanol	12,000 ppm	2,000 [LEL] ppm
d-limonene	Not Available	Not Available
N-methyl-2-pyrrolidone	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is not adequate, then the use of a local exhaust system is recommended.
Personal protection	
Eye and face protection	Safety glasses with side shields or chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, e.g. PVC. The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
Body protection	Not usually needed.
Other protection	Use suitable respiratory equipment if there is inadequate ventilation.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear colourless liquid		
Physical state	Liquid	Relative density (Water = 1)	0.834
Odour	Solvent/orange	Partition coefficient	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Viscosity (cSt)	Not Available

Melting point / freezing point (°C)	Not Available	Initial boiling point and boiling range (°C)	Not Available
Decomposition temperature	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Flammable.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption. The material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time.
Eye	There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

Toxicological effects of ingredients

naphtha petroleum, hydrotreated heavy	Acute toxicity	Oral LD50 (rat) >5000 mg/kg Dermal LD50 (rabbit) >5000 mg/kg Inhalation LC50 (rat) >5000 mg/m3 (8hr)
	Skin corrosion/irritation	Mildly irritating to skin with prolonged exposure (Based on test data for structurally similar materials)
	Eye damage/irritation	May cause mild, short-lasting discomfort to eyes (Based on test data for structurally similar materials)
	Respiratory/skin sensitization	Not expected to be a respiratory or skin sensitiser. (Based on test data for structurally similar materials)
	Germ cell mutagenicity	Not expected to be a germ cell mutagen (Based on test data for structurally similar materials)
	Carcinogenicity	Not expected to cause cancer (Based on test data for structurally similar materials)
	Reproductive toxicity	Not expected to be a reproductive toxicant (Based on test data for structurally similar materials)
	STOT (single exposure)	Not expected to cause organ damage from a single exposure. Negligible hazard at ambient/normal handling temperatures. Vapour/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects including death.
	STOT (repeated exposure)	Not expected to cause organ damage from prolonged or repeated exposure (Based on test data for structurally similar materials). Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis
	Aspiration toxicity	May be fatal if swallowed and enters airways (Based on physicochemical properties of the material). Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
ethylene glycol monobutyl ether	Acute toxicity	Oral LD50 (guinea pig) 1414 mg/kg Dermal LD50 (guinea pig) >2000 mg/kg Inhalation LC0 >3.1 mg/l>641 ppm 1h
	Skin corrosion/irritation	Causes skin irritation.
	Eye damage/irritation	Causes serious eye irritation.
	Respiratory/skin sensitization	Not classified No study available.
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	STOT (single exposure)	High concentrations may cause central nervous system depression
	STOT (repeated exposure)	Based on repeated exposure toxicity values, not classified
	Aspiration toxicity	Based on physico-chemical values or lack of human evidence. Not classified
isopropanol	Acute toxicity	Oral LD50 (rat) 5045 – 5840 mg/kg Dermal LD50 (rabbit) 12800 mg/kg Inhalation LC50 (rat) 16000 ppm/8h
	Skin corrosion/irritation	May be irritating to skin
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	Not expected to be a sensitizer
	Germ cell mutagenicity	Not considered to be a mutagenic hazard
	Carcinogenicity	Not considered to be a carcinogenic hazard.
	Reproductive toxicity	Not considered to be toxic to reproduction
	STOT (single exposure)	May cause drowsiness or dizziness
	STOT (repeated exposure)	Not expected to cause toxicity to a specific organ
	Aspiration toxicity	Not expected to be an aspiration hazard

d-limonene	Acute toxicity	Oral LD50 (rat) 4400 mg/kg Dermal LD50 (rabbit) >5000 mg/kg
	Skin corrosion/irritation	Causes skin irritation
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	May cause an allergic skin reaction
	Germ cell mutagenicity	No data available
	Carcinogenicity	No data available
	Reproductive toxicity	No data available
	STOT (single exposure)	No data available
	STOT (repeated exposure)	No data available
	Aspiration toxicity	May be fatal if swallowed and enters airways
N-methyl-2-pyrrolidone	Acute toxicity	LD50 Oral - Rat - 3,914 mg/kg LD50 Dermal - Rabbit - 8,000 mg/kg LDLO Inhalation - Rat - 4 h - > 5100 ppm
	Skin corrosion/irritation	Irritating to skin. May cause harm to the unborn child
	Eye damage/irritation	Irritating to eyes.
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	No Data Available
	Carcinogenicity	No Data Available
	Reproductive toxicity	May cause harm to the unborn child
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	Bone marrow - Irregularities - Based on Human Evidence
	Aspiration toxicity	No Data Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
naphtha, petroleum,	EC50(ECx)	96	Algae or other aquatic plants	64mg/l
hydrotreated heavy	EC50	96	Algae or other aquatic plants	64mg/l
ethylene glycol monobutyl	LC50	96	Fish	1-250mg/L
ether	EC50	48	Crustacea	>1-mg/L
	EC50	96	Algae or other aquatic plants	>1-mg/L
	NOEC	24	Crustacea	>1-mg/L
Isopropanol	LC50	96	Fish	9-640mg/L
	EC50	48	Crustacea	12500mg/L
	EC50	72	Algae or other aquatic plants	>1000mg/L
	EC0	24	Crustacea	5-102mg/L
	NOEC	504	Crustacea	=30mg/L
d-limonene	LC50	96	Fish	0.46mg/L
	EC50	48	Crustacea	0.307mg/L
	EC50	72	Algae or other aquatic plants	0.214mg/L
	NOEC	0	Algae or other aquatic plants	<0.05-1.5mg/L
N-methyl-2-pyrrolidone	LC50	96	Fish	>500mg/L
	EC50	48	Crustacea	ca.4897mg/L
	EC50	72	Algae or other aquatic plants	>500mg/L
	EC10	72	Algae or other aquatic plants	92.6mg/L
	NOEC	504	Crustacea	12.5mg/L

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high watermark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
d-limonene	HIGH	HIGH
N-methyl-2-pyrrolidone	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
ethylene glycol monobutyl ether	LOW (BCF = 2.51)
isopropanol	LOW (LogKOW = 0.05)
d-limonene	HIGH (LogKOW = 4.8275)
N-methyl-2-pyrrolidone	LOW (BCF = 16)

Mobility in soil

Ingredient	Mobility
ethylene glycol monobutyl ether	HIGH (KOC = 1)
isopropanol	HIGH (KOC = 1.06)
d-limonene	LOW (KOC = 1324)
N-methyl-2-pyrrolidone	LOW (KOC = 20.94)


SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Containers may still present a chemical hazard/ danger when empty. Take care to dispose of product / containers in a manner compliant with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	
HAZCHEM	*3YE

Land transport (ADG) – NOT REGULATED FOR THE TRANSPORTATION OF DANGEROUS GOODS IN PACK SIZES OF 5L OR LESS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

NAPHTHA PETROLEUM, HEAVY, HYDROTREATED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) – Agents classified by AIRC monographs.

ISOPROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

D-LIMONENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

N-METHYL-2-PYRROLIDONE (872-50-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	28/07/2021
Initial Date	27/03/2017

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	28/07/2021	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes.

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



ACTICHEM POG

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP482

Version No: 2.1

Issue date: 26/02/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	ACTICHEM POG
Product code	AP482
Pack sizes	500ml & 5L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Paint, Oil and Grease Remover for Carpets & Hard Surfaces
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Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	6
GHS Classification	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, STOT - SE (Resp. Irr.) Category 3, Reproductive Toxicity Category 1B, Skin Sensitizer Category 1, STOT - SE (Narcosis) Category 3, Acute Toxicity - Inhalation Category 3.
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

Hazard pictograms	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360D	May damage the unborn child.
H317	May cause an allergic skin reaction
H336	May cause drowsiness or dizziness
H331	Toxic if inhaled
AUH019	May form explosive peroxides

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / eye protection / face protection.
P284	Wear respiratory protection
P261	Avoid breathing mist / vapours / spray.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P305+P351+P338+P337+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice / attention.
P302+P362+P352+P333+P313	IF ON SKIN: Take off contaminated clothing and wash before reuse. Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice / attention.
P304+P340+P311	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor.
P308+P313	IF pregnant and exposed or concerned: Get medical advice / attention.

Precautionary statement(s) Storage

P403+P405+P233	Store locked up, in a well-ventilated place. Keep container tightly closed.
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Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
111-76-2	30-60	<u>ethylene glycol monobutyl ether</u>
872-50-4	10-30	<u>N-methyl-2-pyrrolidone</u>
5989-27-5	10-30	<u>d-limonene</u>
9016-45-9	<10	<u>Nonyl phenol ethoxylates</u>
67-63-0	<10	<u>Isopropyl alcohol</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <p>Wash out immediately with fresh running water.</p> <p>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</p> <p>Seek medical attention without delay;</p> <p>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p> <p>If pain persists or recurs seek medical attention.</p>
Skin Contact	<p>If skin contact occurs:</p> <p>Immediately remove all contaminated clothing, including footwear.</p> <p>Flush skin and hair with running water (and soap if available).</p> <p>Seek medical attention in event of irritation or rash.</p>
Inhalation	<p>If fumes or combustion products are inhaled remove from contaminated area.</p> <p>Lay patient down. Keep warm and rested.</p> <p>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</p> <p>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</p> <p>Transport to hospital, or doctor, without delay.</p>
Ingestion	<p>If swallowed do NOT induce vomiting.</p> <p>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</p> <p>Observe the patient carefully.</p> <p>Never give liquid to a person showing signs of being sleepy or with reduced awareness, i.e. becoming unconscious.</p> <p>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</p> <p>Seek medical advice.</p>

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.
- ▶ Water spray or fog - Large fires only.

Special hazards arising from the substrate or mixture

Fire incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<p>Alert Fire Brigade and tell them location and nature of hazard.</p> <p>Wear full body protective clothing with breathing apparatus.</p> <p>Prevent, by any means available, spillage from entering drains or water course.</p> <p>Use water delivered as a fine spray to control fire and cool adjacent area.</p> <p>Avoid spraying water onto liquid pools.</p> <p>DO NOT approach containers suspected to be hot.</p> <p>Cool fire exposed containers with water spray from a protected location.</p> <p>If safe to do so, remove containers from path of fire.</p>
Fire/Explosion Hazard	<p>WARNING: In use may form flammable/ explosive vapour-air mixtures.</p> <p>Combustible.</p> <p>Slight fire hazard when exposed to heat or flame.</p> <p>Heating may cause expansion or decomposition leading to violent rupture of containers.</p> <p>May emit acrid smoke.</p> <p>Mists containing combustible materials may be explosive.</p> <p>On combustion, may emit toxic fumes of carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x) and other pyrolysis products typical of burning organic material.</p> <p>May emit corrosive fumes.</p> <p>WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.</p>
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	<p>Environmental hazard - contain spillage.</p> <p>Remove all ignition sources.</p> <p>Clean up all spills immediately.</p> <p>Avoid breathing vapours and contact with skin and eyes.</p> <p>Control personal contact with the substance, by using protective equipment.</p> <p>Contain and absorb spill with sand, earth, inert material or vermiculite.</p> <p>Wipe up.</p> <p>Place in a suitable, labelled container for waste disposal.</p>
Major Spills	<p>Moderate environmental hazard - contain spillage.</p> <p>Wear breathing apparatus plus protective gloves.</p> <p>Prevent, by any means available, spillage from entering drains or water course.</p> <p>No smoking, naked lights or ignition sources.</p> <p>Increase ventilation.</p> <p>Stop leak if safe to do so.</p> <p>Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations.</p> <p>Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.</p>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<p>Product under certain conditions may form explosive peroxides when exposed to light and air.</p> <p>Unopened containers received from the supplier should be safe to store for 18 months. Opened containers should not be stored for more than 12 months.</p> <p>Avoid all personal contact, including inhalation.</p> <p>Wear protective clothing when risk of exposure occurs.</p> <p>Use in a well-ventilated area.</p> <p>Prevent concentration in hollows and sumps.</p> <p>DO NOT enter confined spaces until atmosphere has been checked.</p> <p>Avoid smoking, naked lights or ignition sources.</p> <p>Avoid contact with incompatible materials.</p> <p>When handling, DO NOT eat, drink or smoke.</p> <p>Keep containers securely sealed when not in use.</p> <p>Avoid physical damage to containers.</p> <p>DO NOT allow clothing wet with material to stay in contact with skin</p>
Other information	<p>Store in original containers.</p> <p>Keep containers securely sealed.</p> <p>No smoking, naked lights or ignition sources.</p> <p>Store in a cool, dry, well-ventilated area.</p> <p>Store away from incompatible materials and foodstuff containers.</p> <p>Protect containers against physical damage and check regularly for leaks.</p> <p>Observe manufacturer's storage and handling recommendations contained within this SDS.</p>

Conditions for safe storage, including any incompatibilities

Suitable container	Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Certain of the ingredients may form unstable peroxides in storage. Avoid strong oxidising agents, strong acids and strong caustics.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	96.9 mg/m ³ / 20 ppm	242 mg/m ³ / 50 ppm	Not Available	Sk
Australia Exposure Standards	N-methyl-2-pyrrolidone	1-Methyl-2-pyrrolidone	103 mg/m ³ / 25 ppm	309 mg/m ³ / 75 ppm	Not Available	Sk
Australia Exposure Standards	isopropanol	Isopropyl alcohol	400 ppm / 983 mg/m ³	1230 mg/m ³ / 500 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethylene glycol monobutyl ether	Butoxyethanol, 2-; (Glycol ether EB)	20 ppm	20 ppm	700 ppm
N-methyl-2-pyrrolidone	Methyl 2-pyrrolidinone, 1-; (N-Methylpyrrolidone)	10 ppm	10 ppm	10 ppm
d-limonene	Limonene, d-	20 ppm	20 ppm	160 ppm
nonylphenol, ethoxylated	Glycols, polyethylene, mono(p-nonylphenol) ether;	9.9 mg/m ³	110 mg/m ³	300 mg/m ³
isopropanol	Isopropyl alcohol	400 ppm	2000 ppm	12000 ppm

Ingredient	Original IDLH	Revised IDLH
ethylene glycol monobutyl ether	700 ppm	700 [Unch] ppm
N-methyl-2-pyrrolidone	Not Available	Not Available
d-limonene	Not Available	Not Available
nonylphenol, ethoxylated	Not Available	Not Available
isopropanol	2000 ppm	Not Available

Exposure controls

Appropriate engineering controls	Always maintain adequate ventilation. The use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, e.g. PVC. NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. Gloves must only be worn on clean hands.
Body protection	See Other protection below
Other protection	Overalls. Respirator Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear colourless liquid		
Physical state	Liquid	Relative density (Water = 1)	0.937
Odour	Citrus odour	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	The material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Ethylene glycol monobutyl ether penetrates the skin easily and will cause more harm on skin contact than through inhalation. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons. Direct contact with the liquid may produce painful burning or stinging of the eyes and lids, watering and inflammation of the conjunctiva and temporary corneal clouding. Eye contact may cause tearing or blurring of vision. Vapour may cause mild eye irritation.
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Ample evidence exists, from results in experimentation that developmental disorders in unborn children are directly caused by human exposure to the material.

Toxicological effects of ingredients

d-limonene	Acute toxicity	Oral LD50 (rat) 4400 mg/kg Dermal LD50 (rabbit) >5000 mg/kg
	Skin corrosion/irritation	Causes skin irritation
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	May cause an allergic skin reaction
	Germ cell mutagenicity	No data available
	Carcinogenicity	No data available
	Reproductive toxicity	No data available
	STOT (single exposure)	No data available
	STOT (repeated exposure)	No data available
	Aspiration toxicity	May be fatal if swallowed and enters airways

N-methyl-2-pyrrolidone	Acute toxicity	LD50 Oral - Rat - 3,914 mg/kg LD50 Dermal - Rabbit - 8,000 mg/kg LDLO Inhalation - Rat - 4 h - > 5100 ppm
	Skin corrosion/irritation	Irritating to skin. May cause harm to the unborn child
	Eye damage/irritation	Irritating to eyes.
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	No Data Available
	Carcinogenicity	No Data Available
	Reproductive toxicity	May cause harm to the unborn child
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	Bone marrow - Irregularities - Based on Human Evidence
ethylene glycol monobutyl ether	Aspiration toxicity	No Data Available
	Acute toxicity	Oral LD50 (guinea pig) 1414 mg/kg Dermal LD50 (guinea pig) >2000 mg/kg Inhalation LC0 >3.1 mg/l/>641 ppm 1h
	Skin corrosion/irritation	Causes skin irritation.
	Eye damage/irritation	Causes serious eye irritation.
	Respiratory/skin sensitization	Not classified No study available.
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	STOT (single exposure)	High concentrations may cause central nervous system depression
nonylphenol ethoxylates	STOT (repeated exposure)	Based on repeated exposure toxicity values, not classified
	Aspiration toxicity	Based on physico-chemical values or lack of human evidence, not classified
	Acute toxicity	Oral LD50 (mouse) 4290 mg/kg
	Skin corrosion/irritation	moderate to severe irritation.
	Eye damage/irritation	moderate to severe irritation
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	Not genotoxic
	Carcinogenicity	No Data Available
	Reproductive toxicity	No Data Available
isopropanol	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
	Acute toxicity	Oral LD50 (rat) 5045 – 5840 mg/kg Dermal LD50 (rabbit) 12800 mg/kg Inhalation LC50 (rat) 16000 ppm/8h
	Skin corrosion/irritation	May be irritating to skin
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	Not expected to be a sensitizer
	Germ cell mutagenicity	Not considered to be a mutagenic hazard
	Carcinogenicity	Not considered to be a carcinogenic hazard.
	Reproductive toxicity	Not considered to be toxic to reproduction
	STOT (single exposure)	May cause drowsiness or dizziness
	STOT (repeated exposure)	Not expected to cause toxicity to a specific organ
	Aspiration toxicity	Not expected to be an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
d-limonene	LC50	96	Fish	0.46mg/L
	EC50	48	Crustacea	0.307mg/L
	EC50	72	Algae or other aquatic plants	0.214mg/L
	NOEC	0	Algae or other aquatic plants	<0.05-1.5mg/L
N-methyl-2-pyrrolidone	LC50	96	Fish	>500mg/L
	EC50	48	Crustacea	ca.4897mg/L
	EC50	72	Algae or other aquatic plants	>500mg/L
	EC10	72	Algae or other aquatic plants	92.6mg/L
	NOEC	504	Crustacea	12.5mg/L
ethylene glycol monobutyl ether	LC50	96	Fish	1-250mg/L
	EC50	48	Crustacea	>1-mg/L
	EC50	96	Algae or other aquatic plants	>1-mg/L
	NOEC	24	Crustacea	>1-mg/L
nonylphenol ethoxylates	NOEC	36.5	Fish	0.0001-mg/L
isopropanol	LC50	96	Fish	9-640mg/L
	EC50	48	Crustacea	12500mg/L
	EC50	72	Algae or other aquatic plants	>1000mg/L
	EC0	24	Crustacea	5-102mg/L
	NOEC	504	Crustacea	=30mg/L

Harmful to aquatic organisms. **DO NOT** discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
N-methyl-2-pyrrolidone	LOW	LOW
d-limonene	HIGH	HIGH

Bio accumulative potential

Ingredient	Bioaccumulation
ethylene glycol monobutyl ether	LOW (BCF = 2.51)
N-methyl-2-pyrrolidone	LOW (BCF = 16)
d-limonene	HIGH (LogKOW = 4.8275)

Mobility in soil

Ingredient	Mobility
ethylene glycol monobutyl ether	HIGH (KOC = 1)
N-methyl-2-pyrrolidone	LOW (KOC = 20.94)
d-limonene	LOW (KOC = 1324)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations.
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

D-LIMONENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

N-METHYL-2-PYRROLIDONE (872-50-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) – Agents classified by AIRC monographs

NONYLPHENOL, ETHOXYLATED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6

ISOPROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	26/02/2021
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	26/02/2021	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



CITRUS GEL

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP486

Version No: 2.2

Issue date: 19/08/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	CITRUS GEL
Product code	AP486
Pack sizes	500ml & 5L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Solvent gel for grease, paint and ink spot removal
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Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	5
GHS Classification	Aspiration Hazard Category 1, Skin Corrosion/Irritation Category 2, Skin Sensitizer Category 1B. Reproductive Toxicity Category 1B
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

Hazard pictogram	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H360D	May damage the unborn child.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use
P202	Do not handle before all safety instructions have been read and understood
P281	Use personal protective equipment as required.
P280	Wear protective gloves.
P261	Avoid breathing fumes or vapours.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P301+P310+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
P302+P362+P352+P333+P313	IF ON SKIN: Take off contaminated clothing. Wash with plenty of water and soap. If skin irritation or rash occurs, get medical advice / attention.
P363	Wash contaminated clothing before reuse.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice/attention.

Precautionary statement(s) Storage

P403+P405+P233	Store locked up, in a well-ventilated place. Keep container tightly closed.
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Precautionary statement(s) Disposal

P501	Dispose of contents / container in accordance with local government regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
5989-27-5	10-30	<u>d-limonene</u>
64742-48-9	30-60	<u>naphtha petroleum, isoparaffin, hydrotreated</u>
872-50-4	<10	<u>N-methyl-2-pyrrolidone</u>

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. If patient is unwell transport to hospital, or doctor, without delay.
Ingestion	If swallowed do NOT induce vomiting. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol

Indication of any immediate medical attention and special treatment needed

For acute or short-term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g., cyanosis, tachypnea, intercostal retraction, and obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardio selective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.
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Special hazards arising from the substrate or mixture

Fire incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	WARNING: In use may form flammable/ explosive vapour-air mixtures, carbon dioxide (CO ₂) and other pyrolysis products typical of burning organic material May emit poisonous fumes. May emit corrosive fumes.
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up. Place spilled material in clean, dry, sealed container. Flush spill area with water. IF PREGNANT take special care not to breath vapours or incur skin contact. (See PPE in Section 8)
Major Spills	Minor hazard. Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle. IF PREGNANT take special care not to breath vapours or incur skin contact. (See PPE in Section 8)
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Do not eat, drink or smoke while handling the product. Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations near containers. Keep containers tightly closed to prevent the production of explosive peroxides. IF PREGNANT take special care not to breath vapours or incur skin contact. (See PPE in Section 8)
Other information	Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Suitable container	Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	There is a small danger of the product forming unstable peroxides in storage if exposed to air for long periods. Is incompatible with strong acids, including acidic clays, peroxides, halogens, vinyl chloride and iodine pentafluoride Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	N-methyl-2-pyrrolidone	1-Methyl-2-pyrrolidone	103 mg/m3 / 25 ppm	309 mg/m3 / 75 ppm	Not Available	Sk


EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
d-limonene	Limonene, d-	20 ppm	20 ppm	160 ppm
naphtha petroleum, isoparaffin, hydrotreated	Naphtha, hydrotreated heavy; (Isopar L-rev 2)	171 ppm	171 ppm	570 ppm
N-methyl-2-pyrrolidone	Methyl 2-pyrrolidinone, 1-; (N-Methylpyrrolidone)	10 ppm	10 ppm	10 ppm

Ingredient	Original IDLH	Revised IDLH
No data is available for any of the ingredients.		

Exposure controls

CAUTION: This product contains an ingredient which may damage the unborn child. It is, therefore, of all importance that pregnant women take every precaution to avoid contact with the product and its vapours.

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended
Personal protection	
Eye and face protection	Eye protection is unlikely to be needed due to the gelled nature of the product.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, e.g. Neoprene rubber The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed
Body protection	See Other protection below
Other protection	P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit. IF PREGNANT – a suitable respirator should be used to avoid breathing in vapours. (See note below)
Thermal hazards	Not Available

Respiratory protection

Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Smooth white gel		
Physical state	Gel	Relative density (Water = 1)	0.891
Odour	Limonene	Molecular weight (g/mol)	Not Available
Odour threshold	Not Available	Auto-ignition temperature	Not Available
pH (as supplied)	Not Applicable	Decomposition	Not Available
Upper Explosive Limit (%)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Partition coefficient n-octanol / water	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not flammable	Oxidising properties	Not Available
Melting point / freezing point (°C)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available

Lower Explosive Limit(%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. IF PREGNANT, inhaled vapours may cause damage to the unborn child.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence. IF PREGNANT and the product is ingested it may cause damage to the unborn child
Skin Contact	This material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. This material may cause an allergic dermatitis in some susceptible persons.
Eye	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Toxicological effects of ingredients

naphtha petroleum, isoparaffin, hydrotreated	Acute toxicity	Oral LD50 (rat) >5000 mg/kg Dermal LD50 (rabbit) >5000 mg/kg Inhalation LC50 (rat) >5000 mg/m3 (8hr)
	Skin corrosion/irritation	Mildly irritating to skin with prolonged exposure (Based on test data for structurally similar materials)
	Eye damage/irritation	May cause mild, short-lasting discomfort to eyes (Based on test data for structurally similar materials)
	Respiratory/skin sensitization	Not expected to be a respiratory or skin sensitizer. (Based on test data for structurally similar materials)
	Germ cell mutagenicity	Not expected to be a germ cell mutagen (Based on test data for structurally similar materials)
	Carcinogenicity	Not expected to cause cancer (Based on test data for structurally similar materials)
	Reproductive toxicity	Not expected to be a reproductive toxicant (Based on test data for structurally similar materials)
	STOT (single exposure)	Not expected to cause organ damage from a single exposure. Negligible hazard at ambient/normal handling temperatures. Vapour/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects including death.
d-limonene	STOT (repeated exposure)	Not expected to cause organ damage from prolonged or repeated exposure (Based on test data for structurally similar materials). Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis
	Aspiration toxicity	May be fatal if swallowed and enters airways (Based on physicochemical properties of the material). Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
	Acute toxicity	Oral LD50 (rat) 4400 mg/kg Dermal LD50 (rabbit) >5000 mg/kg
	Skin corrosion/irritation	Causes skin irritation
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	May cause an allergic skin reaction
	Germ cell mutagenicity	No data available
	Carcinogenicity	No data available
N-methyl-2-pyrrolidone	Reproductive toxicity	No data available
	STOT (single exposure)	No data available
	STOT (repeated exposure)	No data available
	Aspiration toxicity	May be fatal if swallowed and enters airways
	Acute toxicity	LD50 Oral - Rat - 3,914 mg/kg LD50 Dermal - Rabbit - 8,000 mg/kg LDLO Inhalation - Rat - 4 h - > 5100 ppm
	Skin corrosion/irritation	Irritating to skin. May cause harm to the unborn child
	Eye damage/irritation	Irritating to eyes.
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	No Data Available
	Carcinogenicity	No Data Available
	Reproductive toxicity	May cause harm to the unborn child
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	Bone marrow - Irregularities - Based on Human Evidence
	Aspiration toxicity	No Data Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
d-limonene	LC50	96	Fish	0.46mg/L
	EC50	48	Crustacea	0.307mg/L
	EC50	72	Algae or other aquatic plants	0.214mg/L
	NOEC	0	Algae or other aquatic plants	<0.05-1.5mg/L
naphtha petroleum, isoparaffin, hydrotreated	LC50	96	Fish	4.1mg/L
	EC50	48	Crustacea	4.5mg/L
	EC50	72	Algae or other aquatic plants	3.1mg/L
	NOEL	72	Algae or other aquatic plants	0.1mg/L
N-methyl-2-pyrrolidone	LC50	96	Fish	>500mg/L
	EC50	48	Crustacea	ca.4897mg/L
	EC50	72	Algae or other aquatic plants	>500mg/L
	EC10	72	Algae or other aquatic plants	92.6mg/L
	NOEC	504	Crustacea	12.5mg/L

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high watermark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
d-limonene	HIGH	HIGH
N-methyl-2-pyrrolidone	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
d-limonene	HIGH (LogKOW = 4.8275)
N-methyl-2-pyrrolidone	LOW (BCF = 16)

Mobility in soil

Ingredient	Mobility
d-limonene	LOW (KOC = 1324)
N-methyl-2-pyrrolidone	LOW (KOC = 20.94)


SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	
HAZCHEM	Not Applicable

Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

D-LIMONENE (5989-27-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

NAPHTHA PETROLEUM, ISOPARAFFIN, HYDROTREATED (64742-48-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

N-METHYL-2-PYRROLIDONE (872-50-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List

SECTION 16 OTHER INFORMATION**Revision Schedule**

Revision Date	19/08/2021
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	24/12/2020	Sections 2, 11, 12, 15, 16 have been updated or corrected
2.2	19/08/2021	Section 2

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes

Definitions and abbreviations

PC-TWA:	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



ACTICHEM CTR

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP490

Version No: 2.1

Issue date: 09/04/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	ACTICHEM CTR
Product code	AP490
Pack sizes	500ml & 5L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Coffee and tannin stain remover
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Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification	Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

GHS label elements	
SIGNAL WORD	DANGER

Hazard statement(s)

H315	Causes skin irritation
H318	Causes serious eye damage

Precautionary statement(s) Prevention

P280	Wear protective gloves and eye protection.
P264	Wash hands thoroughly after handling.

Precautionary statement(s) Response

P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P362+P352+P332+P313	IF ON SKIN: Take off contaminated clothing and wash before reuse. Wash with plenty of soap and water. If skin irritation occurs, get medical advice / attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7681-57-4	<10	<u>sodium metabisulfite</u>
79-14-1	<10	<u>glycolic acid</u>
111-76-2	<10	<u>ethylene glycol monobutyl ether</u>
67-63-0	<10	<u>isopropanol</u>
2809-21-4	<10	<u>hydroxyethanediphosphonic acid</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with eyes:</p> <p>Obtain medical advice / attention without delay</p> <p>Immediately hold eyelids apart and flush the eye continuously with running water.</p> <p>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</p> <p>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</p> <p>If necessary, transport to hospital or doctor without delay.</p> <p>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>
Skin Contact	<p>If skin contact occurs:</p> <p>Immediately remove all contaminated clothing, including footwear.</p> <p>Flush skin and hair with running water (and soap if available).</p> <p>Seek medical attention in event of irritation.</p>
Inhalation	<p>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</p> <p>Other measures are usually unnecessary.</p>
Ingestion	<p>Immediately give a glass of water.</p> <p>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</p>

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.
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Special hazards arising from the substrate or mixture

Fire incompatibility	None known
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Advice for firefighters

Fire fighting	<p>Alert Fire Brigade and tell them location and nature of hazard.</p> <p>Wear breathing apparatus plus protective gloves in the event of a fire.</p> <p>Prevent, by any means available, spillage from entering drains or water courses</p> <p>Use firefighting procedures suitable for surrounding area.</p> <p>DO NOT approach containers suspected to be hot.</p> <p>Cool fire exposed containers with water spray from a protected location.</p> <p>If safe to do so, remove containers from path of fire.</p> <p>Equipment should be thoroughly decontaminated after use.</p> <p>Slight hazard when exposed to heat, flame and oxidisers.</p>
Fire/Explosion Hazard	<p>Non-combustible.</p> <p>Not considered to be a significant fire risk.</p> <p>Expansion or decomposition on heating may lead to violent rupture of containers.</p> <p>Decomposes on heating and may produce toxic fumes of carbon monoxide (CO), carbon dioxide (CO2) and other pyrolysis products typical of burning organic material</p> <p>May emit corrosive fumes.</p>

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.
Other information	Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container	Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	sodium metabisulfite	Sodium Metabisulphite	5mg/m3	Not available	Not Available	Not Available
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	96.9 mg/m3 / 20 ppm	242 mg/m3 / 50 ppm	Not Available	Sk
Australia Exposure Standards	isopropanol	Isopropyl alcohol	983 mg/m3 / 400 ppm	1230 mg/m3 / 500 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium metabisulfite	Sodium Metabisulphite	5 mg/m3	5 mg/m3	220 mg/m3
Glycolic acid	Glycolic acid; (Hydroxyacetic acid)	4.7 mg/m3	51 mg/m3	390 mg/m3
ethylene glycol monobutyl ether	2-Butoxyethanol	20 ppm	20 ppm	700 ppm
isopropanol	Isopropyl alcohol	400 ppm	400 ppm	12000 ppm
hydroxyethanediphosphonic acid	Hydroxyethylidene-1,1-diphosphonic acid, 1-; (Hydroxyethylidene bisphosphonic acid, 1-)	7.2 mg/m3	79 mg/m3	480 mg/m3

Ingredient	Original IDLH	Revised IDLH
sodium metabisulfite	Not Available	Not Available
Glycolic acid	Not Available	Not Available
ethylene glycol monobutyl ether	700 ppm	700 [Unch] ppm
isopropanol	12000 ppm	2000 [LEL] ppm
hydroxyethanediphosphonic acid	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. - Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, e.g. PVC.
Body protection	See Other protection below
Other protection	Overalls. P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear colourless liquid		
Physical state	Liquid	Relative density (Water = 1)	1.0
Odour	Pungent odour	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	2.7	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact is not thought to have harmful <u>health</u> effects (as classified under EC Directives). Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	If applied to the eyes, this material causes severe eye damage. Isopropanol vapour may cause mild eye irritation. Splashes may cause severe eye irritation, possible corneal burns and eye damage. Eye contact may cause tearing or blurring of vision.
Chronic	No applicable data.

Toxicological effects of ingredients

sodium metabisulfite	Acute toxicity	Oral LD50 (rat) >1540 mg/kg
	Skin corrosion/irritation	Not classified. Based on available data, the classification criteria are not met
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	Not classified. Based on available data, the classification criteria are not met
	Germ cell mutagenicity	Not classified. Based on available data, the classification criteria are not met
	Carcinogenicity	Not classified. Based on available data, the classification criteria are not met
	Reproductive toxicity	Not classified. Based on available data, the classification criteria are not met
	STOT (single exposure)	Not classified. Based on available data, the classification criteria are not met
	STOT (repeated exposure)	Not classified. Based on available data, the classification criteria are not met
	Aspiration toxicity	Not classified. Based on available data, the classification criteria are not met
glycolic acid	Acute toxicity	Oral LD50 (rat) 2040 mg/kg Inhalation LC50 (rat) 7100 mg/m3 4h
	Skin corrosion/irritation	Severe skin irritation
	Eye damage/irritation	Causes severe burns. Risk of serious eye damage. Will affect Eyes with Corrosion, Ulceration, May cause irreversible eye damage
	Respiratory/skin sensitization	No data available
	Germ cell mutagenicity	No adverse effects observed
	Carcinogenicity	Not carcinogenic
	Reproductive toxicity	Not toxic to reproduction
	STOT (single exposure)	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract
	STOT (repeated exposure)	No data available
	Aspiration toxicity	No data available
ethylene glycol monobutyl ether	Acute toxicity	Oral LD50 (guinea pig) 1414 mg/kg Dermal LD50 (guinea pig) >2000 mg/kg Inhalation LC0 >3.1 mg/l>641 ppm 1h
	Skin corrosion/irritation	Causes skin irritation.
	Eye damage/irritation	Causes serious eye irritation.
	Respiratory/skin sensitization	Not classified No study available.
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	STOT (single exposure)	High concentrations may cause central nervous system depression
	STOT (repeated exposure)	Based on repeated exposure toxicity values, not classified
	Aspiration toxicity	Based on physico-chemical values or lack of human evidence. Not classified
isopropanol	Acute toxicity	Oral LD50 (rat) 5045 – 5840 mg/kg Dermal LD50 (rabbit) 12800 mg/kg Inhalation LC50 (rat) 16000 ppm/8h
	Skin corrosion/irritation	May be irritating to skin
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	Not expected to be a sensitizer
	Germ cell mutagenicity	Not considered to be a mutagenic hazard
	Carcinogenicity	Not considered to be a carcinogenic hazard.
	Reproductive toxicity	Not considered to be toxic to reproduction
	STOT (single exposure)	May cause drowsiness or dizziness
	STOT (repeated exposure)	Not expected to cause toxicity to a specific organ
	Aspiration toxicity	Not expected to be an aspiration hazard
hydroxyethane-diphosphonic acid	Acute toxicity	Oral LD50 (Rats): 1,440 - 3,550 mg/kg - (Mice): 1,100 mg/kg
	Skin corrosion/irritation	Causes severe skin burns
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No information available
	Germ cell mutagenicity	Not considered to be genotoxic
	Carcinogenicity	No information available
	Reproductive toxicity	Not considered to cause reproductive or developmental toxicity
	STOT (single exposure)	Inhalation may cause burning of the nose and throat, nausea, vomiting and diarrhoea
	STOT (repeated exposure)	No information available
	Aspiration toxicity	No information available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
sodium metabisulfite	LC50	96	Fish	=21mg/L
	EC50	48	Crustacea	89mg/L
	EC50	96	Algae or other aquatic plants	=40mg/L
	EC20	96	Algae or other aquatic plants	=20mg/L
	NOEC	504	Crustacea	>10mg/

glycolic acid	LC50	96	Fish	>5-mg/L
	EC50	48	Crustacea	141mg/L
	EC50	72	Algae or other aquatic plants	21.6mg/L
	NOEC	72	Algae or other aquatic plants	10mg/L
ethylene glycol monobutyl ether	LC50	96	Fish	1-250mg/L
	EC50	48	Crustacea	>1-mg/L
	EC50	96	Algae or other aquatic plants	>1-mg/L
	NOEC	24	Crustacea	>1-mg/L
isopropanol	LC50	96	Fish	9-640mg/L
	EC50	48	Crustacea	12500mg/L
	EC50	72	Algae or other aquatic plants	>1000mg/L
	EC0	24	Crustacea	5-102mg/L
	NOEC	504	Crustacea	=30mg/L
hydroxyethanediphosphonic acid	LC50	96	Fish	195mg/L
	EC50	48	Crustacea	409mg/L
	EC50	96	Algae or other aquatic plants	3mg/L
	EC0	24	Crustacea	=39.6mg/L
	NOEC	504	Crustacea	0.1mg/L

The product is not considered to be ecotoxic.
DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
glycolic acid	LOW	LOW
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)

Bio accumulative potential

Ingredient	Bioaccumulation
glycolic acid	LOW (LogKOW = -1.11)
ethylene glycol monobutyl ether	LOW (BCH = 2.51)
isopropanol	LOW (LogKOW = -0.05)

Mobility in soil

Ingredient	Mobility
glycolic acid	HIGH (KOC = 1)
ethylene glycol monobutyl ether	HIGH (KOC = 1))
isopropanol	HIGH (KOC = 1.06)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

SODIUM METABISULFITE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
 Australian Inventory of Industrial Chemicals (AIIC)
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC

GLYCOLIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
 Australian Inventory of Industrial Chemicals (AIIC)

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
 Australian Inventory of Industrial Chemicals (AIIC)
 International Agency for Research on Cancer (IARC) – Agents classified by AIRC monographs

ISOPROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australian Inventory of Industrial Chemicals (AIIC)
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

HYDROXYETHANEDIPHOSPHONIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
 Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	09/04/2021
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	09/04/2021	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

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IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



PET & FLOOD

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP491

Version No: 2.1

Issue date: 09/04/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	PET & FLOOD
Product code	AP491
Pack sizes	500ml; 5L & 20L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Urine spot and browning treatment
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Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification	Skin Corrosion/Irritation Category 2, Eye Irritation Category 1
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

Hazard pictogram	
SIGNAL WORD	DANGER

Hazard statement(s)

H315	Causes skin irritation
H318	Causes serious eye irritation

Precautionary statement(s) Prevention

P280	Wear protective gloves and eye protection.
P264	Wash exposed skin thoroughly after handling.

Precautionary statement(s) Response

P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P362+P352+P332+P313	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice / attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
77-92-9	<10	<u>citric acid</u>
79-14-1	<10	<u>glycolic acid</u>
9016-45-9	<10	<u>nonylphenol, ethoxylated</u>
67-63-0	<10	<u>isopropanol</u>
2809-21-4	<10	<u>hydroxyethanediphosphonic acid</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water for 10-15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.
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Special hazards arising from the substrate or mixture.

Fire incompatibilities	None known
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Advice for firefighters

Fire fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	Non-combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO), carbon dioxide (CO2) and other pyrolysis products typical of burning organic material May emit corrosive fumes.
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.
Other information	Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container	Store only in original container
Storage incompatibility	Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air. Avoid strong bases. Segregate from alkalies, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA



Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	isopropanol	Isopropyl alcohol	983 mg/m3 / 400 ppm	1230 mg/m3 / 500 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
Citric acid	Citric acid	0.37 mg/m3	4 mg/m3	590 mg/m3
Glycolic acid	Glycolic acid; (Hydroxyacetic acid)	4.7 mg/m3	51 mg/m3	390 mg/m3
nonylphenol, ethoxylated	Ethoxylated nonylphenol; (Nonyl phenyl polyethylene glycol ether)	9.9 mg/m3	110 mg/m3	300 mg/m3
isopropanol	Isopropyl alcohol	400 ppm	400 ppm	12000 ppm
hydroxyethanediphosphonic acid	Hydroxyethylidene-1,1-diphosphonic acid, 1-; (Hydroxyethylidene bisphosphonic acid, 1-)	7.2 mg/m3	79 mg/m3	480 mg/m3

Ingredient	Original IDLH	Revised IDLH
Citric acid	Not Available	Not Available
Glycolic acid	Not Available	Not Available
nonylphenol, ethoxylated	Not Available	Not Available
isopropanol	12000 ppm	2000 [LEL] ppm
hydroxyethanediphosphonic acid	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	 
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. - Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves. Neoprene is recommended for this application
Body protection	See Other protection below
Other protection	Overalls. P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear yellow liquid		
Physical state	Liquid	Relative density (Water = 1)	1.0
Odour	Lemon	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	2.5 – 3.0	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational animal or human evidence.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition. Skin contact is not thought to have harmful <u>health</u> effects (as classified under EC Directives). Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	If applied to the eyes, this material causes severe eye damage. Isopropanol vapour may cause mild eye irritation. Splashes may cause severe eye irritation, possible corneal burns and eye damage. Eye contact may cause tearing or blurring of vision..
Chronic	No applicable data.

Toxicological effects of ingredients

citric acid	Acute toxicity	Oral LD50 (rat) 3000 – 12000 mg/kg
	Skin corrosion/irritation	May cause skin irritation, redness
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	No evidence of sensitisation
	Germ cell mutagenicity	No evidence of mutagenicity.
	Carcinogenicity	No evidence of carcinogenicity
	Reproductive toxicity	No evidence of reproductive or developmental toxicity
	STOT (single exposure)	May cause respiratory irritation; Inhalation of citric acid aerosols may induce coughing and bronchoconstriction.
	STOT (repeated exposure)	Not considered to cause serious damage to health from repeated exposure
	Aspiration toxicity	No information available

glycolic acid	Acute toxicity	Oral LD50 (rat) 2040 mg/kg Inhalation LC50 (rat) 7100 mg/m3 4h
	Skin corrosion/irritation	Severe skin irritation
	Eye damage/irritation	Causes severe burns. Risk of serious eye damage. Will affect Eyes with Corrosion, Ulceration, May cause irreversible eye damage
	Respiratory/skin sensitization	No data available
	Germ cell mutagenicity	No adverse effects observed
	Carcinogenicity	Not carcinogenic
	Reproductive toxicity	Not toxic to reproduction
	STOT (single exposure)	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract
	STOT (repeated exposure)	No data available
nonylphenol ethoxylated	Aspiration toxicity	No data available
	Acute toxicity	Oral LD50 (mouse) 4290 mg/kg
	Skin corrosion/irritation	moderate to severe irritation.
	Eye damage/irritation	moderate to severe irritation
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	Not genotoxic
	Carcinogenicity	No Data Available
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
isopropanol	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
	Acute toxicity	Oral LD50 (rat) 5045 – 5840 mg/kg Dermal LD50 (rabbit) 12800 mg/kg Inhalation LC50 (rat) 16000 ppm/8h
	Skin corrosion/irritation	May be irritating to skin
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	Not expected to be a sensitizer
	Germ cell mutagenicity	Not considered to be a mutagenic hazard
	Carcinogenicity	Not considered to be a carcinogenic hazard.
	Reproductive toxicity	Not considered to be toxic to reproduction
hydroxyethane-diphosphonic acid	STOT (single exposure)	May cause drowsiness or dizziness
	STOT (repeated exposure)	Not expected to cause toxicity to a specific organ
	Aspiration toxicity	Not expected to be an aspiration hazard
	Acute toxicity	Oral LD50 (Rats): 1,440 - 3,550 mg/kg - (Mice): 1,100 mg/kg
	Skin corrosion/irritation	Causes severe skin burns
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No information available
	Germ cell mutagenicity	Not considered to be genotoxic
	Carcinogenicity	No information available
	Reproductive toxicity	Not considered to cause reproductive or developmental toxicity
	STOT (single exposure)	Inhalation may cause burning of the nose and throat, nausea, vomiting and diarrhoea
	STOT (repeated exposure)	No information available
	Aspiration toxicity	No information available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
citric acid	LC50	48	Fish	440 mg/L
	EC50	24	Daphnia	1535 mg/L
	EC50	192	algae	425 mg/L
glycolic acid	LC50	96	Fish	>5-mg/L
	EC50	48	Crustacea	141mg/L
	EC50	72	Algae or other aquatic plants	21.6mg/L
	NOEC	72	Algae or other aquatic plants	10mg/L
nonylphenol ethoxylated	NOEC	36.5	Fish	0.0001-mg/L
isopropanol	LC50	96	Fish	9-640mg/L
	EC50	48	Crustacea	12500mg/L
	EC50	72	Algae or other aquatic plants	>1000mg/L
	EC0	24	Crustacea	5-102mg/L
	NOEC	504	Crustacea	=30mg/L
hydroxyethanediphosphonic acid	LC50	96	Fish	195mg/L
	EC50	48	Crustacea	409mg/L
	EC50	96	Algae or other aquatic plants	3mg/L
	EC0	24	Crustacea	=39.6mg/L
	NOEC	504	Crustacea	0.1mg/L

Toxic to aquatic organisms. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites..

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Glycolic acid	LOW	LOW
citric acid	LOW	LOW
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
nonylphenol, ethoxylated	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
Glycolic acid	LOW (LogKOW = -1.11)
citric acid	LOW (LogKOW = -1.64)
isopropanol	LOW (LogKOW = -0.05)
nonylphenol, ethoxylated	LOW (LogKOW = 0.05)

Mobility in soil

Ingredient	Mobility
Glycolic acid	HIGH (KOC = 1)
citric acid	LOW (KOC = 10))
isopropanol	HIGH (KOC = 1.06)
nonylphenol, ethoxylated	LOW (KOC = 940)

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION**Labels Required**

Marine Pollutant	NO
HAZCHEM	Not applicable

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture****CITRIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)

GLYCOLIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

NONYLPHENOL, ETHOXYLATED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6

ISOPROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

HYDROXYETHANEDIPHOSPHONIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION**Revision Schedule**

Revision Date	09/04/2021
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	09/04/2021	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



RUST REMOVER

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP492

Version No: 3.1

Issue date: 28/12/2020

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	RUST REMOVER
Product code	AP492
Pack sizes	500ml and 5L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	High performance rust spot remover
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Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	5
GHS Classification	Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B, Acute Toxicity (Inhalation) Category 4, Acute Toxicity (Oral) Category 4 <i>Classification drawn from HCIS and ECHA C&L Inventory.</i>

Label elements

Hazard pictograms	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H314	Causes severe skin burns and eye damage
H302	Harmful if swallowed
H332	Harmful if inhaled.
AUH071	Corrosive to the respiratory tract

Precautionary statement(s) Prevention

P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P260	Do not breathe fumes / vapours / spray
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P264	Wash exposed skin thoroughly after handling

Precautionary statement(s) Response

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303+P310+P363+P361+P353	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Take off immediately all contaminated clothing and wash before reuse. Rinse skin with water/shower.
P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P310+P340	IF INHALED: Immediately call a POISON CENTER or doctor. Remove person to fresh air and keep in a position comfortable for breathing.

Precautionary statement(s) Storage

P405	Store locked up
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Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7664-38-2	<10	<u>phosphoric acid</u>
1341-49-7	<1	<u>ammonium bifluoride</u>
144-62-7	<10	<u>oxalic acid</u>
111-76-2	<10	<u>ethylene glycol monobutyl ether</u>
2235-54-3	<10	<u>ammonium lauryl sulfate</u>
2809-21-4	<10	<u>hydroxyethanediphosphonic acid</u>

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <p>Immediately hold eyelids apart and flush the eye continuously with running water.</p> <p>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</p> <p>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</p> <p>Transport to hospital or doctor without delay.</p> <p>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel..</p>
Skin Contact	<p>If skin contact occurs:</p> <p>Immediately remove all contaminated clothing, including footwear.</p> <p>Flush skin and hair with running water (and soap if available). Continue rinsing for 20 minutes or until told to stop by a POISON CENTRE or doctor.</p> <p>Seek medical advice / attention.</p>
Inhalation	<p>If fumes or combustion products are inhaled remove from contaminated area.</p> <p>Lay patient down. Keep warm and rested.</p> <p>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</p> <p>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained.</p> <p>Perform CPR if necessary.</p> <p>Transport to hospital, or doctor, without delay.</p>
Ingestion	<p>For advice, contact a Poisons Information Centre or a doctor at once.</p> <p>Urgent hospital treatment is likely to be needed.</p> <p>If swallowed do NOT induce vomiting.</p> <p>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</p> <p>Observe the patient carefully.</p> <p>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</p> <p>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</p> <p>Transport to hospital or doctor without delay.</p>

Indication of any immediate medical attention and special treatment needed.

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	<p>Foam.</p> <p>Dry chemical powder.</p> <p>BCF (where regulations permit).</p> <p>Carbon dioxide.</p> <p>Water spray or fog</p>
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Special hazards arising from the substrate or mixture

Fire incompatibility	None known
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Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	Non-combustible. Not considered to be a significant fire risk. Acids may react with metals to produce hydrogen, a highly flammable and explosive gas. Heating may cause expansion or decomposition leading to violent rupture of containers. May emit corrosive, poisonous fumes. May emit acrid smoke. Decomposition may produce toxic fumes of phosphorus oxides (POx).
HAZCHEM	2X

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Wear protective clothing, gloves and eye protection Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	DO NOT allow clothing wet with material to stay in contact with skin. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.
Other information	

Conditions for safe storage, including any incompatibilities

Suitable container	DO NOT use glass, aluminium or galvanised containers Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Avoid storing with strong bases, strong oxidisers, chlorites and hypochlorites.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	phosphoric acid	phosphoric acid	1 mg/m3	3 mg/m3	Not Available	Not Available
Australia Exposure Standards	ammonium bifluoride	Fluorides (as F)	2.5 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	20 ppm / 96.9 mg/m3	242 mg/m3 / 50 ppm	Not Available	Not Available
Australia Exposure Standards	oxalic acid	Oxalic acid	1 mg/m3	2 mg/m3	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
phosphoric acid	phosphoric acid	Not Available	Not Available	Not Available
ammonium bifluoride	Ammonium hydrogen fluoride; (Ammonium bifluoride)	11 mg/m3	130 mg/m3	750 mg/m3
ethylene glycol monobutyl ether	2-Butoxyethanol	60 ppm	120 ppm	700 ppm
oxalic acid	Oxalic acid, anhydrous; (Ethanedioic acid)	2 mg/m3	20 mg/m3	500 mg/m3
hydroxyethanediphosphonic acid	Hydroxyethylidene-1,1-diphosphonic acid, 1-	7.2 mg/m3	79 mg/m3	480 mg/m3

Ingredient	Original IDLH	Revised IDLH
phosphoric acid	10,000 mg/m ³	1,000 mg/m ³
ammonium bifluoride	Not Available	Not Available
ethylene glycol monobutyl ether	700 ppm	Not Available
oxalic acid	500 mg/m ³	Not Available
hydroxyethanediphosphonic acid	Not Available	Not Available
ammonium lauryl sulfate	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. If ventilation is poor the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with side shields. OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. Lens should be removed in a clean environment only after workers have washed hands thoroughly
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, Neoprene or butyl are recommended for this application
Body protection	See Other protection below
Other protection	Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Opaque gel		
Physical state	Gel	Relative density (Water = 1)	1.05
Odour	Benzaldehyde	Viscosity (cSt)	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	2-3	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Partition coefficient n-octanol / water	Not Available
Initial boiling point and boiling range (°C)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Non flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Molecular weight (g/mol)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.
Ingestion	Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident. Ingestion of large quantity of phosphoric acid may cause severe abdominal pains, thirst, academia, difficult breathing, convulsions, collapse, shock and death. Although less hazardous than nitric and sulfuric acid, phosphoric acid has equal corrosive action upon ingestion.
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption The material may cause irritation to the skin. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	Vapours from the product may produce transient discomfort to the eye characterised by tearing or conjunctival redness (as with windburn). Splashes may cause severe eye irritation, possible corneal burns and eye damage. Eye contact may cause tearing or blurring of vision.
Chronic	Repeated exposure or prolonged contact may produce dermatitis, and conjunctivitis.

Toxicological effects of ingredients

oxalic acid	Acute toxicity	Oral LD50 (rat) 475 mg/kg Dermal LD50 (rabbit) 2000 mg/kg
	Skin corrosion/irritation	Contact with skin may result in irritation. Solutions of 5% to 10% oxalic acid are irritating to the skin after prolonged exposure and can cause corrosive injury.
	Eye damage/irritation	A severe eye irritant. Contamination of eyes can result in permanent injury.
	Respiratory/skin sensitization	Not sensitising
	Germ cell mutagenicity	Non-mutagenic
	Carcinogenicity	No available data
	Reproductive toxicity	Not toxic to reproduction
	STOT (single exposure)	Exposure to this compound can result in systemic effects including kidney damage, muscle twitching, cramps and nervous system complaints.
	STOT (repeated exposure)	Long term exposure can result in kidney stones and stone formation in the urinary tract.
phosphoric acid	Aspiration toxicity	No available data
	Acute toxicity	Oral LD50 (rat): 1250 mg/kg Dermal LD50 (rabbit): 2740 mg/kg
	Skin corrosion/irritation	Corrosive to skin - may cause skin burns
	Eye damage/irritation	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
	Respiratory/skin sensitization	No data available
	Germ cell mutagenicity	No data available
	Carcinogenicity	No data available
	Reproductive toxicity	No data available
	STOT (single exposure)	No data available
ethylene glycol monobutyl ether	STOT (repeated exposure)	Prolonged exposures can cause necrosis of nasal passages and oedema of lungs
	Aspiration toxicity	No data available
	Acute toxicity	Oral LD50 (guinea pig) 1414 mg/kg Dermal LD50 (guinea pig) >2000 mg/kg Inhalation LC0 >3.1 mg/l>641 ppm 1h
	Skin corrosion/irritation	Causes skin irritation.
	Eye damage/irritation	Causes serious eye irritation.
	Respiratory/skin sensitization	Not classified No study available.
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
ammonium lauryl sulfate	STOT (single exposure)	High concentrations may cause central nervous system depression
	STOT (repeated exposure)	Based on repeated exposure toxicity values, not classified
	Aspiration toxicity	Based on physico-chemical values or lack of human evidence, not classified
	Acute toxicity	no data available
	Skin corrosion/irritation	May cause skin irritation
	Eye damage/irritation	May cause eye irritation
	Respiratory/skin sensitization	no data available
	Germ cell mutagenicity	no data available
	Carcinogenicity	no data available
ammonium bifluoride	Reproductive toxicity	no data available
	STOT (single exposure)	no data available
	STOT (repeated exposure)	no data available
	Aspiration toxicity	no data available
	Acute toxicity	Oral LD50 (rat) 60 – 130 mg/kg
	Skin corrosion/irritation	Causes skin burns. Contact with liquid is corrosive and causes severe burns and ulceration
	Eye damage/irritation	Causes eye burns
	Respiratory/skin sensitization	no data available
	Germ cell mutagenicity	no data available
hydroxyethanediphosphonic acid	Carcinogenicity	no data available
	Reproductive toxicity	no data available
	STOT (single exposure)	no data available
	STOT (repeated exposure)	Chronic inhalation and may cause chronic fluoride poisoning (fluorosis)
	Aspiration toxicity	no data available
	Acute toxicity	Oral LD50 (rat) 1440 – 3550 mg/kg
	Skin corrosion/irritation	Causes severe skin burns
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No information available
	Germ cell mutagenicity	Not considered to be genotoxic
	Carcinogenicity	No information available
	Reproductive toxicity	Not considered to cause reproductive or developmental toxicity
	STOT (single exposure)	Inhalation may cause burning of the nose and throat, nausea, vomiting and diarrhoea
	STOT (repeated exposure)	No information available
	Aspiration toxicity	No information available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
ammonium bifluoride	LC50	96	Fish	0.068mg/L
	EC50	48	Crustacea	97mg/L
	EC50	96	Algae or other aquatic plants	43mg/L
	NOEC	96	Crustacea	0.79mg/L
phosphoric acid	LC50	96	Fish	-43-72mg/L
	EC50	48	Crustacea	>5.62mg/L
	EC50	72	Algae or other aquatic plants	77.9mg/L
	NOEC	48	Crustacea	5.62mg/L
ethylene glycol monobutyl ether	LC50	96	Fish	1250-mg/L
	EC50	48	Crustacea	164mg/L
	EC50	72	Algae or other aquatic plants	623mg/L
	NOEL	336	Not Available	49.50000-mg/L
ammonium lauryl sulfate	Not Available	Not Available	Not Available	Not Available
oxalic acid	EC50	48	Crustacea	-125-150mg/L
	EC50	72	Algae or other aquatic plants	>18.39-<19.92mg/L
	NOEC	0.33	Algae or other aquatic plants	-0.002-0.003e mol/dm ³
hydroxyethanediphosphonic acid	LC50	96	Fish	195mg/L
	EC50	48	Crustacea	409mg/L
	EC50	96	Algae or other aquatic plants	3mg/L
	EC0	24	Crustacea	≈39.6mg/L
	NOEC	504	Crustacea	0.1mg/L

On the basis of available evidence concerning either toxicity, persistence, potential to accumulate and or observed environmental fate and behaviour, the material may present a danger, immediate or long-term and /or delayed, to the structure and/ or functioning of natural ecosystems. Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
phosphoric acid	HIGH	HIGH
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
oxalic acid	LOW	LOW
hydroxyethanediphosphonic acid	HIGH	HIGH

Bio accumulative potential

Ingredient	Bioaccumulation
phosphoric acid	LOW (LogKOW = 0.7699)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)
oxalic acid	LOW (LogKOW = -1.7365)
hydroxyethanediphosphonic acid	LOW (BCF = 71)

Mobility in soil

Ingredient	Mobility
phosphoric acid	HIGH (KOC = 1)
ethylene glycol monobutyl ether	HIGH (KOC = 1)
oxalic acid	HIGH (KOC = 1.895)
hydroxyethanediphosphonic acid	LOW (KOC = 20.81)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations.
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	2X

Land transport (ADG) not applicable NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS IN PACK SIZES OF 5L OE LESS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

PHOSPHORIC ACID (7664-38-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)

AMMONIUM BIFLUORIDE (1341-49-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

OXALIC ACID (144-62-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

AMMONIUM LAURYL SULFATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)

HYDROXYETHANEDIPHOSPHONIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	28/12/2020
Initial Date	18/11/2016

SDS Version Summary

Version	Issue Date	Sections Updated
3.1	28/12/2020	Sections 2, 3, 4, 5, 7, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



SPOTAWAY U

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP493

Version No: 2.1

Issue date: 31/12/2020

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	SPOTAWAY U
Product code	AP493
Pack sizes	500ml: 5L & 20L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Urine spot remover
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Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available


SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	6
GHS Classification	Eye Damage Category 2.
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

Hazard pictogram	
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SIGNAL WORD	WARNING
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Hazard statement(s)

H319	Causes serious eye irritation
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Precautionary statement(s) Prevention

P280	Wear eye protection/face protection.
P264	Wash exposed skin thoroughly after handling

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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Precautionary statement(s) Storage

Not applicable

Precautionary statement(s) Disposal

Not applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7722-84-1	<8%	hydrogen peroxide

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water for 10-15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. If pain persists or recurs seek medical attention. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Flush skin with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	Immediately give a glass of water. Do NOT induce vomiting. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed.

Hydrogen peroxide at moderate concentrations (5% or more) is a strong oxidant.

- Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended, and the possibility of local corticosteroid therapy should be considered.
- Because of the likelihood of systemic effects attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided.
- There is remote possibility, however, that a nasogastric or gastric tube may be required for the reduction of severe distension due to gas formation.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	For hydrogen peroxide NOTE: Chemical extinguishing agents may accelerate decomposition. [CCINFO] There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.
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Special hazards arising from the substrate or mixture

Fire incompatibilities	None known
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Advice for firefighters

Fire fighting	Alert Fire Brigade and tell them location and nature of hazard. Product will produce oxygen which will support and stimulate combustion. Wear breathing apparatus plus protective gloves in the event of a fire. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire..
Fire/Explosion Hazard	Product will produce oxygen which will support and stimulate combustion. Expansion or decomposition on heating may lead to violent rupture of containers.
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Store in containers with vented lids Avoid physical damage to containers.
Other information	Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container	Store only in original container
Storage incompatibility	Avoid storage with reducing agents, acids and alkalis. Avoid storage with combustible organic matter.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL) INGREDIENT DATA



Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	hydrogen peroxide	Hydrogen peroxide	1.4 mg/m3 / 1 ppm	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
hydrogen peroxide	Hydrogen peroxide - 30%	33 ppm	170 ppm	330 ppm

Ingredient	Original IDLH	Revised IDLH
hydrogen peroxide	75 ppm	75 [Unch] ppm

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	 
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. - Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves. Neoprene is recommended for this application
Body protection	See Other protection below
Other protection	Overalls. P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear liquid		
Physical state	Liquid	Relative density (Water = 1)	1.0
Odour	Mild peroxide odour	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	3.5 – 4.5	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. Solutions of hydrogen peroxide slowly decompose, releasing oxygen.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Inhaling excessive levels of mist may result in headache, dizziness, vomiting, diarrhoea, irritability, sleeplessness and fluid in the lungs, and cause extreme irritation of the nose and chest, cough, discomfort, shortness of breath and inflammation of the nose and throat.
Ingestion	Accidental ingestion of the material may be harmful and may produce serious damage to the health of the individual. Hydrogen peroxide may cause blistering and bleeding from the throat and stomach. When swallowed, it may release large quantities of oxygen which could hyper-distend the stomach and gut and may cause internal bleeding, mouth and throat burns and rupture of the gut.
Skin Contact	Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models).
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health.

Toxicological effects of ingredients

Hydrogen Peroxide 50%	Acute toxicity	Oral LD50 (rat) 1127 mg/kg (calculated)
	Skin corrosion/irritation	Highly irritating
	Eye damage/irritation	Corrosive
	Respiratory/skin sensitization	Not sensitising.
	Germ cell mutagenicity	No adverse effect observed (negative)
	Carcinogenicity	Not a carcinogenic substance according to MAK, IARC, NTP, OSHA, ACGIH
	Reproductive toxicity	No available data
	STOT (single exposure)	No available data
	STOT (repeated exposure)	No available data
	Aspiration toxicity	No available data

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
Hydrogen peroxide 50%	LC50	96	Fish	0.020 mg/l
	EC50	3	Algae or other aquatic plants	0.27 mg/l
	EC50	48	Crustacea	2.32 mg/l
	EC50	72	Algae or other aquatic plants	0.71 mg/l
	NOEC	192	Fish	0.028 mg/l

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
hydrogen peroxide	Under ambient conditions quick hydrolysis, reduction or decomposition occurs.	Photochemical degradation (air) takes place.

Bio accumulative potential

Ingredient	Bioaccumulation
hydrogen peroxide	LOW (LogKOW = -1.571)

Mobility in soil

Ingredient	Mobility
hydrogen peroxide	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not applicable

Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

HYDROGEN PEROXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	31/12/2020
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	31/12/2020	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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SAFETY DATA SHEET



BROWNAWAY

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP494

Version No: 2.1

Issue date: 12/04/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	BROWNAWAY
Product code	AP494
Pack sizes	500ml & 5L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Carpet browning treatment and coffee destainer
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Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification	Skin Corrosion/Irritation Category 2, Eye Damage/Irritation Category 1
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

Hazard pictogram	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H315	Causes skin irritation
H318	Causes serious eye damage

Precautionary statement(s) Prevention

P280	Wear protective gloves and eye protection.
P264	Wash exposed skin thoroughly after handling

Precautionary statement(s) Response

P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P362+P352+P332+P313	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical advice / attention. Take off contaminated clothing and wash before reuse

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
77-92-9	<10	<u>citric acid</u>
79-14-1	<10	<u>glycolic acid</u>
151-21-3	<10	<u>sodium lauryl sulphate</u>
67-63-0	<10	<u>isopropanol</u>
2809-21-4	<10	<u>hydroxyethanediphosphonic acid</u>
Trade secret	<10	<u>proprietary polymer</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water for 10-15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas
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Special hazards arising from the substrate or mixture.

Fire incompatibilities	None known
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Advice for firefighters

Fire fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	Non-combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO), carbon dioxide (CO2) and other pyrolysis products typical of burning organic material May emit corrosive fumes.
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.
Other information	Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container	Store only in original container
Storage incompatibility	Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air. Avoid strong bases. Segregate from alkalies, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA



Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	isopropanol	Isopropyl alcohol	400 ppm / 983 mg/m3	1230 mg/m3 / 500 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
Citric acid	Citric acid	0.37 mg/m3	4 mg/m3	590 mg/m3
Glycolic acid	Glycolic acid; (Hydroxyacetic acid)	4.7 mg/m3	51 mg/m3	390 mg/m3
Sodium lauryl sulphate	Sodium lauryl sulphate	3.9 mg/m3	42 mg/m3	260 mg/m3
isopropanol	Isopropyl alcohol	400 ppm	2000 ppm	12000 ppm
hydroxyethanediphosphonic acid	Hydroxyethylidene-1,1-diphosphonic acid, 1-; (Hydroxyethylidene bisphosphonic acid, 1-)	7.2 mg/m3	79 mg/m3	480 mg/m3

Ingredient	Original IDLH	Revised IDLH
Citric acid	Not Available	Not Available
Glycolic acid	Not Available	Not Available
Sodium lauryl sulphate	Not available	Not available
isopropanol	2000 ppm	Not Available
hydroxyethanediphosphonic acid	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	 
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. - Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves. Neoprene is recommended for this application
Body protection	See Other protection below
Other protection	Overalls. P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear liquid		
Physical state	Liquid	Relative density (Water = 1)	1.0
Odour	Slight chemical	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	2.5 – 3.0	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition. Skin contact is not thought to have harmful <u>health</u> effects (as classified under EC Directives). Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	If applied to the eyes, this material causes severe eye damage. Isopropanol vapour may cause mild eye irritation. Splashes may cause severe eye irritation, possible corneal burns and eye damage. Eye contact may cause tearing or blurring of vision.
Chronic	No applicable data.

Toxicological effects of ingredients

citric acid	Acute toxicity	Oral LD50 (rat) 3000 – 12000 mg/kg
	Skin corrosion/irritation	May cause skin irritation, redness
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	No evidence of sensitisation
	Germ cell mutagenicity	No evidence of mutagenicity.
	Carcinogenicity	No evidence of carcinogenicity
	Reproductive toxicity	No evidence of reproductive or developmental toxicity
	STOT (single exposure)	May cause respiratory irritation; Inhalation of citric acid aerosols may induce coughing and bronchoconstriction.
	STOT (repeated exposure)	Not considered to cause serious damage to health from repeated exposure
glycolic acid	Aspiration toxicity	No information available
	Acute toxicity	Oral LD50 (rat) 2040 mg/kg Inhalation LC50 (rat) 7100 mg/m3 4h
	Skin corrosion/irritation	Severe skin irritation
	Eye damage/irritation	Causes severe burns. Risk of serious eye damage. Will affect Eyes with Corrosion, Ulceration, May cause irreversible eye damage
	Respiratory/skin sensitization	No data available
	Germ cell mutagenicity	No adverse effects observed
	Carcinogenicity	Not carcinogenic
	Reproductive toxicity	Not toxic to reproduction
	STOT (single exposure)	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract
sodium lauryl sulphate	STOT (repeated exposure)	No data available
	Aspiration toxicity	No data available
	Acute toxicity	Oral LD50 (rat) 977 mg/kg Dermal LD50 (rabbit) 580 mg/kg
	Skin corrosion/irritation	Rabbit, 4 hour patch test, 25%: Strong erythema and edema (Data on sodium dodecyl sulfate)(48)
	Eye damage/irritation	Rabbit, Draize test, 20%: Strongly irritating (Data on sodium dodecyl sulfate)(48)
	Respiratory/skin sensitization	Guinea pig, Buehler Test: Negative (Data on sodium dodecyl sulfate)(48)
	Germ cell mutagenicity	Ames test (TA98, TA100, WP2try-): Negative / Rec-assay (H17, M45): Negative
	Carcinogenicity	AS (Alcohol Sulphates) are not carcinogenic
	Reproductive toxicity	No Data Available
isopropanol	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
	Acute toxicity	Oral LD50 (rat) 5045 – 5840 mg/kg Dermal LD50 (rabbit) 12800 mg/kg Inhalation LC50 (rat) 16000 ppm/8h
	Skin corrosion/irritation	May be irritating to skin
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	Not expected to be a sensitizer
	Germ cell mutagenicity	Not considered to be a mutagenic hazard
	Carcinogenicity	Not considered to be a carcinogenic hazard.
hydroxyethane-diphosphonic acid	Reproductive toxicity	Not considered to be toxic to reproduction
	STOT (single exposure)	May cause drowsiness or dizziness
	STOT (repeated exposure)	Not expected to cause toxicity to a specific organ
	Aspiration toxicity	Not expected to be an aspiration hazard
	Acute toxicity	Oral LD50 (Rats): 1,440 - 3,550 mg/kg - (Mice): 1,100 mg/kg
	Skin corrosion/irritation	Causes severe skin burns
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No information available
	Germ cell mutagenicity	Not considered to be genotoxic
proprietary polymer	Carcinogenicity	No information available
	Reproductive toxicity	Not considered to cause reproductive or developmental toxicity
	STOT (single exposure)	Inhalation may cause burning of the nose and throat, nausea, vomiting and diarrhoea
	STOT (repeated exposure)	No information available
	Aspiration toxicity	No information available
	Acute toxicity	Oral LD50 (rat) >5000 mg/kg
	Skin corrosion/irritation	Unlikely to cause skin irritation.
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	It is not a skin sensitizer.
	Germ cell mutagenicity	There is no evidence of mutagenic potential.
	Carcinogenicity	It is unlikely to present a carcinogenic hazard to man. (NTP / IARC / ACGIH / OSHA)
	Reproductive toxicity	None anticipated
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
citric acid	LC50	48	Fish	440 mg/L
	EC50	24	Daphnia	1535 mg/L
	EC50	192	algae	425 mg/L
glycolic acid	LC50	96	Fish	>5-mg/L
	EC50	48	Crustacea	141mg/L
	EC50	72	Algae or other aquatic plants	21.6mg/L
	NOEC	72	Algae or other aquatic plants	10mg/L
sodium lauryl sulphate	LC50	96	Fish	0.59-mg/L
	EC50	48	Crustacea	=0.939mg/L
	EC50	96	Algae or other aquatic plants	-0.4-3.7mg/L
	BCF	1	Fish	0.85-mg/L
	EC15	Not coded	Not Available	-0.05-0.25mg/L
	NOEC	0.08	Fish	0.0000013-mg/L
isopropanol	LC50	96	Fish	9-640mg/L
	EC50	48	Crustacea	12500mg/L
	EC50	72	Algae or other aquatic plants	>1000mg/L
	EC0	24	Crustacea	5-102mg/L
	NOEC	504	Crustacea	=30mg/L
hydroxyethanediphosphonic acid	LC50	96	Fish	195mg/L
	EC50	48	Crustacea	409mg/L
	EC50	96	Algae or other aquatic plants	3mg/L
	EC0	24	Crustacea	=39.6mg/L
	NOEC	504	Crustacea	0.1mg/L
Proprietary polymer C	LC50	96	Fish	100 mg/l
	EC50	48	Aquatic invertebrates)	100 mg/l
	EC50	72	Algae	100 mg/l

Toxic to aquatic organisms. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Glycolic acid	LOW	LOW
citric acid	LOW	LOW
sodium lauryl sulfate	HIGH	HIGH
Proprietary polymer	LOW	NO DATA

Bio accumulative potential

Ingredient	Bioaccumulation
Glycolic acid	LOW (LogKOW = -1.11)
citric acid	LOW (LogKOW = -1.64)
sodium lauryl sulfate	LOW (BCF = 7.15)
Proprietary polymer	LOW

Mobility in soil

Ingredient	Mobility
Glycolic acid	HIGH (KOC = 1)
citric acid	LOW (KOC = 10))
sodium lauryl sulfate	LOW (KOC = 10220)
Proprietary polymer	NO DATA

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

CITRIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)

GLYCOLIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

SODIUM LAURYL SULFATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)

ISOPROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

HYDROXYETHANEDIPHOSPHONIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	12/04/2021
Initial Date	26/09/2017

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	12/04/2021	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes.

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS

SAFETY DATA SHEET



PROTEIN SPOTTER

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP495

Version No: 2.1

Issue date: 12/04/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	PROTEIN SPOTTER
Product code	AP495
Pack sizes	500ml & 5L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Spotter for protein based stains
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Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification	Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, <i>Classification drawn from HCIS and ECHA C&L Inventory.</i>

Label elements

Hazard pictogram	
SIGNAL WORD	DANGER

Hazard statement(s)

H315	Causes skin irritation
H318	Causes serious eye damage

Precautionary statement(s) Prevention

P280	Wear protective gloves and eye protection.
P264	Wash exposed skin thoroughly after handling

Precautionary statement(s) Response

P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P362+P352+P332+P313	IF ON SKIN: Take off contaminated clothing and wash before reuse. Wash with plenty of soap and water. If skin irritation occurs, get medical advice / attention.

Precautionary statement(s) Storage

Not applicable

Precautionary statement(s) Disposal

Not applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
141-43-5	<10	<u>monoethanolamine</u>
1336-21-6	<10	<u>ammonium hydroxide</u>
111-76-2	<10	<u>ethylene glycol monobutyl ether</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Obtain medical advice / attention without delay Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If necessary, transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas
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Special hazards arising from the substrate or mixture

Fire incompatibility	None known
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Advice for firefighters

Fire fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Slight hazard when exposed to heat, flame and oxidisers.
Fire/Explosion Hazard	Non-combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO), carbon dioxide (CO2) and other pyrolysis products typical of burning organic material May emit corrosive fumes.
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.
Other information	Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container	Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA



Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	monoethanolamine	ethanolamine	7.5 mg/m3 / 3 ppm	15 mg/m3 / 6 ppm	Not Available	Not Available
Australia Exposure Standards	ammonium hydroxide	ammonia	17 mg/m3 / 25 ppm	24 mg/m3 / 35 ppm	Not Available	Not Available
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	96.9 mg/m3 / 20 ppm	242 mg/m3 / 50 ppm	Not Available	

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
monoethanolamine	ethanolamine	6 ppm	6 ppm	1,000 ppm
ammonium hydroxide	ammonium hydroxide	61 ppm	330 ppm	2,300 ppm
ethylene glycol monobutyl ether	2-Butoxyethanol	20 ppm	20 ppm	700 ppm

Ingredient	Original IDLH	Revised IDLH
monoethanolamine	1,000 ppm	30 ppm
ammonium hydroxide	500 ppm	300 ppm
ethylene glycol monobutyl ether	700 ppm	700 [Unch] ppm

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	 
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. - Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves. Butyl is recommended for this application
Body protection	See Other protection below
Other protection	Overalls. P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear colourless liquid		
Physical state	Liquid	Relative density (Water = 1)	1.0
Odour	Ammonia	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	11.8	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Prolonged or regular minor exposure to the vapour may cause persistent irritation of the eyes, nose and upper respiratory tract.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. Skin contact is not thought to have harmful <u>health</u> effects (as classified under EC Directives). Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	No applicable data.

Toxicological effects of ingredients

monoethanolamine	Acute toxicity	Oral LD50 (rat) 1089 mg/kg Dermal LD50 (rat) 2504 mg/kg Inhalation LC50 >1300 mg/m3 6h
	Skin corrosion/irritation	Causes severe skin burns and eye damage.
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No sensitizing effect
	Germ cell mutagenicity	The substance was not genotoxic in a test with mammals
	Carcinogenicity	Not carcinogenic
	Reproductive toxicity	Not classified
	STOT (single exposure)	May cause respiratory irritation
	STOT (repeated exposure)	The substance may cause damage to the upper respiratory tract after repeated inhalation, as shown in animal studies
	Aspiration toxicity	No aspiration hazard expected
ammonium hydroxide	Acute toxicity	Oral LD50 (rat) 350 mg/kg Inhalation (human) 400 - 700 ppm causes severe irritation. 2000 - 3000 ppm may be fatal within 30 minutes. 10,000 ppm is immediately fatal
	Skin corrosion/irritation	Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.
	Eye damage/irritation	Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	No Data Available
	Carcinogenicity	No Data Available
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	Repeated or prolonged exposure may result in bronchitis
	Aspiration toxicity	No Data Available
ethylene glycol monobutyl ether	Acute toxicity	Oral LD50 (guinea pig) 1414 mg/kg Dermal LD50 (guinea pig) >2000 mg/kg Inhalation LC0 >3.1 mg/l>641 ppm 1h
	Skin corrosion/irritation	Causes skin irritation.
	Eye damage/irritation	Causes serious eye irritation.
	Respiratory/skin sensitization	Not classified No study available.
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	STOT (single exposure)	High concentrations may cause central nervous system depression
	STOT (repeated exposure)	Based on repeated exposure toxicity values, not classified
	Aspiration toxicity	Based on physico-chemical values or lack of human evidence. Not classified

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
monoethanolamine	LC50	96	Fish	2-70mg/L
	EC50	48	Crustacea	32.6mg/L
	EC50	72	Algae or other aquatic plants	2.1mg/L
	NOEC	504	Crustacea	0.85mg/L
ammonium hydroxide	LC50	96	Lepomis macrochirus (Bluegill sunfish)	0.87 mg/l
	LC50	96	Pimephales promelas (fathead minnow)	1.2 mg/l
	EC50	48	Daphnia magna (Water flea),	0.66 mg/l
ethylene glycol monobutyl ether	LC50	96	Fish	1-250mg/L
	EC50	48	Crustacea	>1-mg/L
	EC50	96	Algae or other aquatic plants	>1-mg/L
	NOEC	24	Crustacea	>1-mg/L

Moderately toxic to fish and aquatic organisms.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
monoethanolamine	LOW	LOW
ammonium hydroxide	LOW	LOW
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)

Bio accumulative potential

Ingredient	Bioaccumulation
monoethanolamine	LOW (LogKOW = -1.31)
ammonium hydroxide	LOW (LogKOW = -0.229)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)

Mobility in soil

Ingredient	Mobility
monoethanolamine	HIGH (KOC = 1)
ammonium hydroxide	LOW (KOC = 14.3)
ethylene glycol monobutyl ether	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product / packaging disposal	Dispose of contents/container in accordance with local regulations.
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SECTION 14 TRANSPORT INFORMATION**Labels Required**

Marine Pollutant	NO
HAZCHEM	Not applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture****MONOETHANOLAMINE IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

AMMONIUM HYDROXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) – Agents classified by AIRC monographs.

SECTION 16 OTHER INFORMATION**Revision Schedule**

Revision Date	12/04/2021
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	12/04/2021	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS