

SAFETY DATA SHEET



AQUASOLVE

ACTICHEM PTY LTD

Catalogue number: AP125

Version No: 2.3

Date Issued: 30/03/2022

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	AQUASOLVE
Product code	AP125
Pack sizes	5L & 15L

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

Relevant identified uses	Non-caustic degreaser
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Details of the manufacturer/importer

Registered company name	ACTICHEM 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	02 4966 5516

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	Skin Corrosion/Irritation Category 2, Serious Eye Irritation Category 2 <i>Classification drawn from HCIS and ECHA C&L Inventory.</i>

Label elements

Hazard pictogram	
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SIGNAL WORD	WARNING
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Hazard statement(s)

H315	Causes skin irritation
H319	Causes serious eye irritation

Precautionary statement(s) Prevention

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

Precautionary statement(s) Response

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.
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.

Precautionary statement(s) Storage

P405	Store locked up
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Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
10213-79-3	<10	<u>Sodium metasilicate pentahydrate</u>
9016-45-9	<10	<u>Nonylphenol ethoxylate</u>
111-76-2	10-30	<u>Ethylene glycol monobutyl ether</u>
Trade secret	<10	<u>Proprietary surfactant</u>
7320-34-5	<10	<u>Tetrapotassium pyrophosphate</u>
64-02-8	<10	<u>EDTA tetra sodium salt</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: Seek 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.</p>
Skin Contact	<p>If skin or hair contact occurs: Seek medical advice / attention without delay. Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. If necessary, transport to hospital, or doctor.</p>
Inhalation	<p>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.</p>
Ingestion	<p>For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. 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. 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	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.
Fire/Explosion Hazard	The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers. May emit acid smoke. Decomposes on heating and produces toxic fumes of: carbon monoxide (CO), carbon dioxide (CO ₂) 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	Moderate environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing vapours and 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	Moderate environmental hazard - contain spillage. Wear eye protection and protective gloves. 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. Wear protective clothing when risk of exposure occurs. 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	

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	Incompatible with oxidisers, permanganates, peroxides, ammonium persulfate, bromine dioxide, nitrates, strong acids, sulfuric acid, nitric acid, perchloric acid.

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	20 ppm / 96.9 mg/m ³	242 mg/m ³ / 50 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium metasilicate, pentahydrate	Sodium metasilicate pentahydrate	45 mg/m ³	45 mg/m ³	170 mg/m ³
nonylphenol, ethoxylated	Glycols, polyethylene, mono(p-nonylphenol) ether; (Nonoxynol-9)	9.9 mg/m ³	110 mg/m ³	300 mg/m ³
ethylene glycol monobutyl ether	Butoxyethanol, 2-; (Glycol ether EB)	60ppm	120ppm	700ppm
tetrapotassium pyrophosphate	Tetrapotassium diphosphonate	61 mg/m ³	680 mg/m ³	1,200 mg/m ³
EDTA tetra sodium salt	Ethylenediaminetetraacetic acid, tetrasodium salt; (Tetrasodium EDTA)	75 mg/m ³	830 mg/m ³	5000 mg/m ³

Ingredient	Original IDLH	Revised IDLH
sodium metasilicate, pentahydrate	Not Available	Not Available
nonylphenol, ethoxylated	Not Available	Not Available
ethylene glycol monobutyl ether	700ppm	Not Available
proprietary chemical	Not Available	Not Available
tetrapotassium pyrophosphate	Not Available	Not Available
EDTA tetra sodium salt	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	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. Butyl or neoprene are 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 straw coloured liquid		
Physical state	Liquid	Relative density (Water = 1)	1.067
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Available
pH (as supplied)	12.9	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	Not normally a hazard due to non-volatile nature of product The material has NOT been classified by EC Directives or other classification systems as 'harmful by inhalation' nor has it been designated as 'irritating to the respiratory system'. This is because of the lack of corroborating animal or human evidence.
Ingestion	The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	The material can produce chemical burns following direct contact with the skin. Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. 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. Ethylene glycol monobutyl ether penetrates the skin easily and will cause more harm on skin contact than through inhalation.
Eye	If applied to the eyes, this material causes severe eye damage. Vapours or mists may be extremely irritating.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Toxicological effects of ingredients

sodium metasilicate pentahydrate	Acute toxicity	LD50 Oral - rat - 847 mg/kg
	Skin corrosion/irritation	Corrosive. Causes skin burns
	Eye damage/irritation	Corrosive. Causes eye burns
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	Sodium silicate was not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay
	Carcinogenicity	There are no known reports of carcinogenicity of sodium silicates.
	Reproductive toxicity	Decreased numbers of births and survival to weaning was reported for rats fed sodium silicate in their drinking water at 600 and 1200 ppm.
	STOT (single exposure)	Dust corrosive to respiratory tract
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
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
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
proprietary surfactant	Acute toxicity	Oral LD50 (rat) 2292 mg/kg
	Skin corrosion/irritation	Skin irritant
	Eye damage/irritation	Eye irritant (OECD 437)
	Respiratory/skin sensitization	There is no data available
	Germ cell mutagenicity	No known significant effects or critical hazards.
	Carcinogenicity	No known significant effects or critical hazards.
	Reproductive toxicity	No known significant effects or critical hazards.
	STOT (single exposure)	There is no data available
	STOT (repeated exposure)	There is no data available
	Aspiration toxicity	There is no data available

tetrapotassium pyrophosphate	Acute toxicity	Oral LD50 (rabbit) >1000 mg/kg Dermal LD50 (rabbit) >4640 mg/kg
	Skin corrosion/irritation	Causes skin irritation. Irritation is likely to be more severe if the skin is moist or wet
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	EU/CLP • Classification criteria not met
	Germ cell mutagenicity	EU/CLP • Classification criteria not met
	Carcinogenicity	Does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens
	Reproductive toxicity	EU/CLP • Classification criteria not met
	STOT (single exposure)	EU/CLP • Classification criteria not met
	STOT (repeated exposure)	EU/CLP • Classification criteria not met
	Aspiration toxicity	EU/CLP • Classification criteria not met
EDTA tetrasodium salt	Acute toxicity	Oral LD50 (rat): >1780 - <2000 mg/kg
	Skin corrosion/irritation	Contact with skin may result in irritation
	Eye damage/irritation	Irritant (rabbit).
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	No adverse effect observed
	Carcinogenicity	Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Test Duration (hr)	Species	Value
Sodium metasilicate pentahydrate	LC50	96	Fish	2-320 mg/L
	EC50	48	Crustacea	1-700mg/L
	EC50	72	Algae or other aquatic plants	207mg/L
	EC100	48	Crustacea	10-mg/L
Nonylphenol, ethoxylated	LC50	48	Crustacea	1.43mg/L
	EC50	72	Algae or other aquatic plants	2.5mg/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
Proprietary surfactant B	EC50	48	Daphnia	37.9 mg/L
	LC50	96	Fish	36.9 mg/L
potassium pyrophosphate	LC50	96	Fish	>100mg/L
	EC50	48	Crustacea	>100mg/L
	EC50	72	Algae or other aquatic plants	>100mg/L
	NOEC	72	Algae or other aquatic plants	>100mg/L
EDTA tetrasodium salt	LC50	96	Fish	41mg/L
	EC50	48	Crustacea	140mg/L
	EC50	72	Algae or other aquatic plants	=1.01mg/L
	EC10	72	Algae or other aquatic plants	=0.48mg/L
	NOEC	33	Algae or other aquatic plants	0.0003802-mg/L

Data extracted from Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity

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-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

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
nonylphenol, ethoxylated	LOW	LOW
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 56 days)

Bio accumulative potential

Ingredient	Bioaccumulation
nonylphenol, ethoxylated	LOW (BCF = 16)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)

Mobility in soil

Ingredient	Mobility
nonylphenol, ethoxylated	LOW (KOC = 940)
ethylene glycol monobutyl ether	HIGH (KOC = 1)

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** None

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****SODIUM METASILICATE, PENTAHYDRATE IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 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

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

POTASSIUM PYROPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australian Inventory of Industrial Chemicals (AIIC)

EDTA TETRASODIUM SALT 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	30/03/2022
Initial Date	15/08/2015

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	12/10/2020	Sections 2,3,8,11,12,15,16 have been updated or corrected
2.2	01/01/2021	Section 2 has been corrected
2.3	30/03/2022	Section 3, 8, 11, 12, 15.

Other information**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
BEL:	Biological Exposure Index

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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