### **Mirotone**

Chemwatch: **5398-04** Version No: **3.1.14.9** 

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

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L.GHS.AUS.EN.RISK

### SECTION 1 Identification of the substance / mixture and of the company / undertaking

### **Product Identifier**

Product name	AQUAPRO 8068 HITEK	
Chemical Name	ot Applicable	
Synonyms	duct code: 8068; AQUAPRO 8068 HITEK GLOSS Code: 8068-9; AQUAPRO 8068/30 HITEK SATIN Code: 8068-3; UAPRO 8068/10 HITEK MATT Code: 8068-1; NOTE: This product is available in a range of gloss levels.; Any intermediate as levels not listed above will also conform to the "Composition" in Section 3 of this Safety Data Sheet.	
Chemical formula	lot Applicable	
Other means of identification	Not Available	

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

Relevant identified uses	For full details on application and properties consult the technical datasheet AQUAPRO 8068 is a single pack, water based floor
Relevant identified uses	finish that exhibits excellent abrasion and chemical resistance

### Details of the supplier of the safety data sheet

Registered company name	Mirotone	
Address	Marigold Street Revesby NSW 2212 Australia	
Telephone	+61 2 9795 3700	
Fax	+61 2 9771 3601	
Website	www.mirotone.com, www.polycure.com.au	
Email	Not Available	

### **Emergency telephone number**

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	+61 2 9186 1132
Other emergency telephone numbers	+61 1800 951 288

Once connected and if the message is not in your prefered language then please dial 01

### **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	
Classification [1]	Serious Eye Damage/Eye Irritation Category 2A	
	*LIMITED EVIDENCE	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 -	
	Annex VI	

### Label elements

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Signal word

Warning

### Hazard statement(s)

H319	Causes serious eye irritation

### \*LIMITED EVIDENCE

### Precautionary statement(s) General

P101	medical advice is needed, have product container or label at hand.	
P102	Keep out of reach of children.	
P103	Read carefully and follow all instructions.	

### Precautionary statement(s) Prevention

P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas 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	
P337+P313	If eye irritation persists: 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
34590-94-8	1-10	dipropylene glycol monomethyl ether
57-55-6	1-5	propylene glycol
60828-78-6	1-5	trimethylnonyl ether ethoxylated
121-44-8	<1	triethylamine
Not Available	balance	Ingredients determined not to be hazardous
Legend:		2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - awn from C&L * EU IOELVs available

### **SECTION 4 First aid measures**

### Description of first aid measures

	If this product comes in contact with the eyes:
	Wash out immediately with fresh running water.
Eye Contact	▶ 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.
	<ul> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> </ul>
	Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
	If skin contact occurs:

### Skin Contact

- ► Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).

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	► Seek medical attention in event of irritation.
Inhalation	<ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> </ul>

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### **SECTION 5 Firefighting measures**

### **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.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:

- ▶ foam.
- ▶ dry chemical powder.

### Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.
Advice for firefighters	
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>DO NOT approach containers suspected to be hot.</li> </ul>
Fire/Explosion Hazard	<ul> <li>The material is not readily combustible under normal conditions.</li> <li>However, it will break down under fire conditions and the organic component may burn.</li> <li>Not considered to be a significant fire risk.</li> <li>Heat may cause expansion or decomposition with violent rupture of containers.</li> <li>Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).</li> <li>Other decomposition products include:</li> <li>carbon dioxide (CO2)</li> <li>other pyrolysis products typical of burning organic material.</li> <li>May emit poisonous fumes.</li> <li>May emit corrosive fumes.</li> </ul>
HAZCHEM	Not Applicable

### **SECTION 6 Accidental release measures**

### Personal precautions, protective equipment and emergency procedures

See section 8

### **Environmental precautions**

See section 12

### Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>Wipe up.</li> </ul>
Major Spills	Moderate hazard.  Clear area of personnel and move upwind.  Alert Fire Brigade and tell them location and nature of hazard.

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- ▶ Wear breathing apparatus plus protective gloves.
- ▶ Prevent, by any means available, spillage from entering drains or water course.

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

### **SECTION 7 Handling and storage**

### Precautions for safe handling

# Safe handling PO 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. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. 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.

### Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Polyethylene or polypropylene container.</li> <li>Packing as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	Avoid strong acids, bases.

### **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	dipropylene glycol monomethyl ether	(2-Methoxymethylethoxy) propanol	50 ppm / 308 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	propylene glycol	Propane-1,2-diol: particulates only	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	propylene glycol	Propane-1,2-diol total: (vapour & particulates)	150 ppm / 474 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	triethylamine	Triethylamine	2 ppm / 8 mg/m3	17 mg/m3 / 4 ppm	Not Available	Not Available

### **Emergency Limits**

Ingredient	TEEL-1	TEEL-2	TEEL-3
dipropylene glycol monomethyl ether	150 ppm	1700* ppm	9900** ppm
propylene glycol	30 mg/m3	330 mg/m3	2,000 mg/m3
propylene glycol	30 mg/m3	1,300 mg/m3	7,900 mg/m3
triethylamine	1 ppm	170 ppm	1,000 ppm

Ingredient	Original IDLH	Revised IDLH
dipropylene glycol monomethyl ether	600 ppm	Not Available
propylene glycol	Not Available	Not Available
trimethylnonyl ether ethoxylated	Not Available	Not Available
triethylamine	200 ppm	Not Available

### **Occupational Exposure Banding**

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit

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Ingredient	Occupational Exposure Band Rating Occupational Exposure Band Limit		
trimethylnonyl ether ethoxylated	E	≤ 0.1 ppm	
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.		

### **MATERIAL DATA**

### **Exposure controls**

### Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. Appropriate engineering The basic types of engineering controls are: controls Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. Personal protection Safety glasses with side shields. Chemical goggles. Eye and face protection ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Skin protection See Hand protection below ▶ Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber 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. Hands/feet protection The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. **Body protection** See Other protection below Overalls. P.V.C apron. Other protection Barrier cream. Skin cleansing cream. ▶ Eye wash unit.

### Recommended material(s)

### **GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:

### "Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

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Material	СРІ
BUTYL	С
NATURAL RUBBER	С
NEOPRENE	С
NITRILE	С
PE/EVAL/PE	С
PVA	С
SARANEX-23	С
VITON	С

### Respiratory protection

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AK-AUS P2	-	AK-PAPR-AUS / Class 1 P2
up to 50 x ES	-	AK-AUS / Class 1 P2	-
up to 100 x ES	-	AK-2 P2	AK-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E =

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- \* CPI Chemwatch Performance Index
- A: Best Selection
- B: Satisfactory; may degrade after 4 hours continuous immersion
- C: Poor to Dangerous Choice for other than short term immersion

**NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- 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.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

### **SECTION 9 Physical and chemical properties**

### Information on basic physical and chemical properties

Appearance	Milky white to pale brown low viscosity liquid with a characteristic odour; miscible with water.		
Physical state	Liquid	Relative density (Water = 1)	0.98-1.09
Odour	Not Available	Partition coefficient n-octanol / water	-0.1
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	7-9	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	150-310
Initial boiling point and boiling range (°C)	104 (initial)	Molecular weight (g/mol)	Not Applicable
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)	74-81
Vapour pressure (kPa)	2.3	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (%)	7-8
Vapour density (Air = 1)	0.7	VOC g/L	93-103

### **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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**

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Inhaled	classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and t suitable control measures be used in an occupational setting.	
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.	
Skin Contact	substantial number of individuals following direct contrintact skin of animals, for up to four hours, such inflamexposure period. Skin irritation may also be present at dermatitis (nonallergic). The dermatitis is often charact progress to blistering (vesiculation), scaling and thicked oedema of the spongy layer of the skin (spongiosis) a Open cuts, abraded or irritated skin should not be expently into the blood-stream through, for example, cuts	•
Еуе	Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individual and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.  Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.	
Chronic	Limited evidence suggests that repeated or long-term organs or biochemical systems.	occupational exposure may produce cumulative health effects involving
	TOXICITY	IRRITATION
AQUAPRO 8068 HITEK	Not Available	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 9500 mg/kg <sup>[2]</sup>	Eye (human): 8 mg - mild
dipropylene glycol monomethyl ether	Oral(Rat) LD50; >5000 mg/kg <sup>[1]</sup>	Eye (rabbit): 500 mg/24hr - mild
monometriyi etrici		Skin (rabbit): 238 mg - mild
		Skin (rabbit): 500 mg (open)-mild
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg <sup>[1]</sup>	Eye (rabbit): 100 mg - mild
	Inhalation(Rat) LC50; >44.9 mg/L4h <sup>[2]</sup>	Eye (rabbit): 500 mg/24h - mild
propylene glycol	Oral(Rat) LD50; >10400 mg/kg <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>
		Skin(human):104 mg/3d Intermit Mod
		Skin(human):500 mg/7days mild
		Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
	TOXICITY	IRRITATION
trimethylnonyl ether	Dermal (rabbit) LD50: 4780 mg/kg <sup>[2]</sup>	Eye (rabbit): 100 mg-SEVERE
ethoxylated	Oral(Rat) LD50; 5650 mg/kg <sup>[2]</sup>	Eye (rabbit): 5 mg - SEVERE
		Skin (rabbit): 500 (open) - mild
	TOXICITY	IRRITATION
triath.damin -	Dermal (rabbit) LD50: 200-2000 mg/kg <sup>[1]</sup>	Eye (rabbit): 0.25 mg/24h SEVERE
triethylamine	Inhalation(Rat) LC50; 3.675 mg/l4h <sup>[1]</sup>	Eye(rabbit): 50ppm/30d int SEVERE
	Oral(Cat) LD50; >370<730 mg/kg <sup>[1]</sup>	Skin (rabbit): 365 mg open mild
Legend:	Nalue obtained from Europe ECHA Registered Sub Unless otherwise specified data extracted from RTEC	stances - Acute toxicity 2.* Value obtained from manufacturer's SDS.

# DIPROPYLENE GLYCOL MONOMETHYL ETHER

for propylene glycol ethers (PGEs):

Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA); tripropylene glycol methyl ether (TPM).

Testing of a wide variety of propylene glycol ethers Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on reproductive organs, the developing embryo and fetus, blood (haemolytic effects), or thymus, are not seen with the commercial-grade propylene glycol ethers. In the ethylene

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series, metabolism of the terminal hydroxyl group produces an alkoxyacetic acid. The reproductive and developmental toxicities of the lower molecular weight homologues in the ethylene series are due specifically to the formation of methoxyacetic and ethoxyacetic acids.

Longer chain length homologues in the ethylene series are not associated with the reproductive toxicity but can cause haemolysis in sensitive species, also through formation of an alkoxyacetic acid. The predominant alpha isomer of all the PGEs (thermodynamically favored during manufacture of PGEs) is a secondary alcohol incapable of forming an alkoxypropionic acid. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

### PROPYLENE GLYCOL

The acute oral toxicity of propylene glycol is very low, and large quantities are required to cause perceptible health damage in humans. Serious toxicity generally occurs only at plasma concentrations over 1 g/L, which requires extremely high intake over a relatively short period of time. It would be nearly impossible to reach toxic levels by consuming foods or supplements, which contain at most 1 g/kg of PG. Cases of propylene glycol poisoning are usually related to either inappropriate intravenous administration or accidental ingestion of large quantities by children. The potential for long-term oral toxicity is also low. Because of its low chronic oral toxicity, propylene glycol was classified by the U. S. Food and Drug Administration as "generally recognized as safe" (GRAS) for use as a direct food additive.

Prolonged contact with propylene glycol is essentially non-irritating to the skin.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

Alcohol ethoxylates are according to CESIO (2000) classified as Irritant or Harmful depending on the number of EO-units:

EO < 5 gives Irritant (Xi) with R38 (Irritating to skin) and R41 (Risk of serious damage to eyes)

EO > 5-15 gives Harmful (Xn) with R22 (Harmful if swallowed) - R38/41

EO > 15-20 gives Harmful (Xn) with R22-41

>20 EO is not classified (CESIO 2000)

Oxo-AE, C13 EO10 and C13 EO15, are Irritating (Xi) with R36/38 (Irritating to eyes and skin) .

AE are not included in Annex 1 of the list of dangerous substances of the Council Directive 67/548/EEC

# TRIMETHYLNONYL ETHER ETHOXYLATED

In general, alcohol ethoxylates (AE) are readily absorbed through the skin of guinea pigs and rats and through the gastrointestinal mucosa of rats. AE are quickly eliminated from the body through the urine, faeces, and expired air (CO2). Orally dosed AE was absorbed rapidly and extensively in rats, and more than 75% of the dose was absorbed. When applied to the skin of humans, the doses were absorbed slowly and incompletely (50% absorbed in 72 hours). Half of the absorbed surfactant was excreted promptly in the urine and smaller amounts of AE appeared in the faeces and expired air (CO2) ). The metabolism of C12 AE yields PEG, carboxylic acids, and CO2 as metabolites. RTECS No.: WZ 6210000

While it is difficult to generalise about the full range of potential health effects posed by exposure to the many different amine compounds, characterised by those used in the manufacture of polyurethane and polyisocyanurate foams, it is agreed that overexposure to the majority of these materials may cause adverse health effects.

- Many amine-based compounds can induce histamine liberation, which, in turn, can trigger allergic and other physiological effects, including bronchoconstriction or bronchial asthma and rhinitis.
- Systemic symptoms include headache, nausea, faintness, anxiety, a decrease in blood pressure, tachycardia (rapid heartbeat), itching, erythema (reddening of the skin), urticaria (hives), and facial edema (swelling). Systemic effects (those affecting the body) that are related to the pharmacological action of amines are usually transient.

Typically, there are four routes of possible or potential exposure: inhalation, skin contact, eye contact, and ingestion. **Inhalation:** 

## TRIETHYLAMINE

Inhalation of vapors may, depending upon the physical and chemical properties of the specific product and the degree and length of exposure, result in moderate to severe irritation of the tissues of the nose and throat and can irritate the lungs.

Products with higher vapour pressures have a greater potential for higher airborne concentrations. This increases the probability

Higher concentrations of certain amines can produce severe respiratory irritation, characterised by nasal discharge, coughing, difficulty in breathing, and chest pains.

Chronic exposure via inhalation may cause headache, nausea, vomiting, drowsiness, sore throat, bronchopneumonia, and possible lung damage. Also, repeated and/or prolonged exposure to some amines may result in liver disorders, jaundice, and liver enlargement. Some amines have been shown to cause kidney, blood, and central nervous system disorders in laboratory animal studies.

While most polyurethane amine catalysts are not sensitisers, some certain individuals may also become sensitized to amines and may experience respiratory distress, including asthma-like attacks, whenever they are subsequently exposed to even very small amounts of vapor.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Inhalation (human) TCLo: 12mg/m3/11W contin.Skin (rabbitmild

# DIPROPYLENE GLYCOL MONOMETHYL ETHER & TRIETHYLAMINE

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be

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intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	•	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

**Legend: X** − Data either not available or does not fill the criteria for classification

✓ – Data available to make classification

### **SECTION 12 Ecological information**

### **Toxicity**

	Endpoint	Test Duration (hr)	Species	Value	Source
AQUAPRO 8068 HITEK	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	>969mg/l	2
dipropylene glycol	LC50	96h	Fish	>1000mg/l	2
monomethyl ether	EC50	48h	Crustacea	1930mg/l	2
	NOEC(ECx)	528h	Crustacea	>=0.5mg/l	2
	EC50	96h	Algae or other aquatic plants	>969mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	NOEC(ECx)	336h	Algae or other aquatic plants	<5300mg/l	1
	EC50	72h	Algae or other aquatic plants	19300mg/l	2
propylene glycol	LC50	96h	Fish	>10000mg/l	2
	EC50	48h	Crustacea	>114.4mg/L	4
	EC50	96h	Algae or other aquatic plants	19000mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
trimethylnonyl ether ethoxylated	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	EC50	72h	Algae or other aquatic plants	6.8mg/l	2
triethylamine	LC50	96h	Fish	24mg/l	2
	BCF	1008h	Fish	<0.5	7
	EC50	48h	Crustacea	17mg/l	2
	NOEC(ECx)	72h	Algae or other aquatic plants	1.1mg/l	2
	EC50	96h	Algae or other aquatic plants	1.167mg/l	2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

### DO NOT discharge into sewer or waterways.

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
dipropylene glycol monomethyl ether	HIGH	HIGH
propylene glycol	LOW	LOW
triethylamine	HIGH	HIGH

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### **Bioaccumulative potential**

Ingredient	Bioaccumulation
dipropylene glycol monomethyl ether	LOW (BCF = 100)
propylene glycol	LOW (BCF = 1)
triethylamine	LOW (BCF = 7.45)

### Mobility in soil

Ingredient	Mobility
dipropylene glycol monomethyl ether	LOW (KOC = 10)
propylene glycol	HIGH (KOC = 1)
triethylamine	LOW (KOC = 107.2)

### **SECTION 13 Disposal considerations**

### Waste treatment methods

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.

# Product / Packaging disposal

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).
- ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

### **SECTION 14 Transport information**

### **Labels Required**

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

### Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
dipropylene glycol monomethyl ether	Not Available
propylene glycol	Not Available
trimethylnonyl ether ethoxylated	Not Available
triethylamine	Not Available

## Transport in bulk in accordance with the ICG Code

Product name	Ship Type
dipropylene glycol monomethyl ether	Not Available
propylene glycol	Not Available

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Product name	Ship Type
trimethylnonyl ether ethoxylated	Not Available
triethylamine	Not Available

### **SECTION 15 Regulatory information**

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

dipropylene glycol monomethyl ether is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

propylene glycol is found on the following regulatory lists

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5  $\,$ 

Australian Inventory of Industrial Chemicals (AIIC)

trimethylnonyl ether ethoxylated is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

triethylamine 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)

### **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (dipropylene glycol monomethyl ether; propylene glycol; trimethylnonyl ether ethoxylated; triethylamine)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (trimethylnonyl ether ethoxylated)
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (trimethylnonyl ether ethoxylated)
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory  No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

### **SECTION 16 Other information**

Revision Date	03/09/2020
Initial Date	24/04/2020

### **SDS Version Summary**

Version	Date of Update	Sections Updated
2.1.1.1	24/04/2020	Fire Fighter (fire/explosion hazard), Ingredients, Supplier Information, Synonyms
3.1.1.1	03/09/2020	Classification change due to full database hazard calculation/update.
3.1.2.1	26/04/2021	Regulation Change
3.1.3.1	03/05/2021	Regulation Change
3.1.4.1	06/05/2021	Regulation Change

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Version	Date of Update	Sections Updated
3.1.5.1	10/05/2021	Regulation Change
3.1.5.2	30/05/2021	Template Change
3.1.5.3	04/06/2021	Template Change
3.1.5.4	05/06/2021	Template Change
3.1.6.4	07/06/2021	Regulation Change
3.1.6.5	09/06/2021	Template Change
3.1.6.6	11/06/2021	Template Change
3.1.6.7	15/06/2021	Template Change
3.1.7.7	17/06/2021	Regulation Change
3.1.8.7	21/06/2021	Regulation Change
3.1.8.8	05/07/2021	Template Change
3.1.9.8	14/07/2021	Regulation Change
3.1.10.8	19/07/2021	Regulation Change
3.1.10.9	01/08/2021	Template Change
3.1.11.9	02/08/2021	Regulation Change
3.1.12.9	05/08/2021	Regulation Change
3.1.13.9	09/08/2021	Regulation Change
3.1.14.9	23/08/2021	Regulation Change

### 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.

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.

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