



## ARDEX 330 Concrete Sealer

ARDEX-QUICSEAL SINGAPORE PTE. LTD.

Chemwatch Hazard Alert Code: 1

Chemwatch: 5682-25

Version No: 2.1

Safety Data Sheet

Issue Date: 11/06/2024

Print Date: 14/06/2024

S.GHS.SGP.EN.E

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

#### Product Identifier

Product name	ARDEX 330 Concrete Sealer
Chemical Name	Not Applicable
Synonyms	Not Available
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Relevant identified uses	Concrete sealer. Use according to manufacturer's directions.
--------------------------	---

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

Registered company name	ARDEX-QUICSEAL SINGAPORE PTE. LTD.
Address	26 Tuas Avenue 4 639376 Singapore
Telephone	+65 6861 7700
Fax	+65 6741 4666
Website	<a href="http://www.ardex-quicseal.com">www.ardex-quicseal.com</a>
Email	marketing@ardex-quicseal.com

#### Emergency telephone number

Association / Organisation	ARDEX-QUICSEAL SINGAPORE PTE. LTD.
Emergency telephone numbers	+65 6861 7700
Other emergency telephone numbers	Not Available

### SECTION 2 Hazards identification

#### Classification of the substance or mixture

Classification	Sensitisation (Skin) Category 1
----------------	---------------------------------

#### Label elements

Hazard pictogram(s)	
---------------------	--

Signal word	<b>Warning</b>
-------------	----------------

**Hazard statement(s)**

<b>H317</b>	May cause an allergic skin reaction.
-------------	--------------------------------------

**Precautionary statement(s) Prevention**

<b>P280</b>	Wear protective gloves and protective clothing.
<b>P261</b>	Avoid breathing mist/vapours/spray.
<b>P272</b>	Contaminated work clothing should not be allowed out of the workplace.

**Precautionary statement(s) Response**

<b>P302+P352</b>	IF ON SKIN: Wash with plenty of water.
<b>P333+P313</b>	If skin irritation or rash occurs: Get medical advice/attention.
<b>P362+P364</b>	Take off contaminated clothing and wash it before reuse.

**Precautionary statement(s) Storage**

Not Applicable

**Precautionary statement(s) Disposal**

<b>P501</b>	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
-------------	--

**SECTION 3 Composition / information on ingredients****Substances**

See section below for composition of Mixtures

**Mixtures**

CAS No	%[weight]	Name
55989-05-4	30-35	<u>ethylmethacrylate, /methacrylic acid/ethyl acrylate polymer, ammonium salt</u>
25265-77-4	2-4	<u>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate</u>
57-55-6	0.3-0.5	<u>propylene glycol</u>
68891-38-3	0.1-0.4	<u>sodium lauryl ether sulfate</u>
55965-84-9	>0.0015	<u>5-chloro-2-methyl-4-isothiazolin-3-one</u>
7732-18-5	63-67	<u>water</u>

**SECTION 4 First aid measures****Description of first aid measures**

<b>Eye Contact</b>	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with fresh running water.</li> <li>▶ 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.</li> <li>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>▶ If fumes or combustion products are inhaled remove from contaminated area.</li> <li>▶ Lay patient down. Keep warm and rested.</li> <li>▶ Prosthesis such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>▶ 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.</li> <li>▶ Transport to hospital, or doctor.</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>▶ <b>If swallowed do NOT induce vomiting.</b></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> </ul>

Continued...

- ▶ Seek medical advice.

### 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.
- ▶ carbon dioxide.

### Special hazards arising from the substrate or mixture

<b>Fire Incompatibility</b>	None known.
-----------------------------	-------------

### Advice for firefighters

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <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>▶ <b>DO NOT</b> approach containers suspected to be hot.</li> <li>▶ Cool fire exposed containers with water spray from a protected location.</li> <li>▶ If safe to do so, remove containers from path of fire.</li> <li>▶ Equipment should be thoroughly decontaminated after use.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <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>▶ May emit acrid smoke.</li> </ul> <p>Decomposes on heating and produces toxic fumes of: carbon dioxide (CO<sub>2</sub>) sulfur oxides (SO<sub>x</sub>) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.</p>

## 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

<b>Minor Spills</b>	<ul style="list-style-type: none"> <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> <li>▶ Place in a suitable, labelled container for waste disposal.</li> </ul>
<b>Major Spills</b>	<ul style="list-style-type: none"> <li>▶ Absorb or contain isothiazolinone liquid spills with sand, earth, inert material or vermiculite.</li> <li>▶ The absorbent (and surface soil to a depth sufficient to remove all of the biocide) should be shovelled into a drum and treated with an 11% solution of sodium metabisulfite (Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub>) or sodium bisulfite (NaHSO<sub>3</sub>), or 12% sodium sulfite (Na<sub>2</sub>SO<sub>3</sub>) and 8% hydrochloric acid (HCl).</li> <li>▶ Glutathione has also been used to inactivate the isothiazolinones.</li> <li>▶ Use 20 volumes of decontaminating solution for each volume of biocide, and let containers stand for at least 30 minutes to deactivate microbicide before disposal.</li> <li>▶ If contamination of drains or waterways occurs, advise emergency services.</li> <li>▶ After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.</li> </ul>

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

## SECTION 7 Handling and storage

### Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> <li>▶ Avoid all personal contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ Prevent concentration in hollows and sumps.</li> <li>▶ <b>DO NOT enter confined spaces until atmosphere has been checked.</b></li> <li>▶ <b>DO NOT allow material to contact humans, exposed food or food utensils.</b></li> <li>▶ Avoid contact with incompatible materials.</li> <li>▶ <b>When handling, DO NOT eat, drink or smoke.</b></li> <li>▶ Keep containers securely sealed when not in use.</li> <li>▶ Avoid physical damage to containers.</li> <li>▶ Always wash hands with soap and water after handling.</li> <li>▶ Work clothes should be laundered separately. Launder contaminated clothing before re-use.</li> <li>▶ Use good occupational work practice.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>▶ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul>
<b>Other information</b>	<ul style="list-style-type: none"> <li>▶ Store in original containers.</li> <li>▶ Keep containers securely sealed.</li> <li>▶ Store in a cool, dry, well-ventilated area.</li> <li>▶ Store away from incompatible materials and foodstuff containers.</li> <li>▶ Protect containers against physical damage and check regularly for leaks.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

### Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	<ul style="list-style-type: none"> <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>
<b>Storage incompatibility</b>	<p>Despite the close similarity in structure, the polyacrylates differ greatly in thermal degradation behaviour from the polymethacrylates (PMAs). Crosslinking, yellowing of the polymer, formation of a high proportion of short chain fragments and evolution of the alcohol and carbon dioxide are characteristics of the breakdown of many polyacrylate esters which are not found in the corresponding methacrylate polymers. Furthermore, although some of the latter give large yields of monomer, the monomer yields from the polyacrylates are extremely small, typically about 0.3% of the polymer weight.</p> <p>PMA has been the subject of several studies During degradation, PMA undergoes both crosslinking and chain scission. Little monomer is produced, the main products consisting of chain fragments. There is some disagreement regarding the yields of the volatile products, methanol and CO<sub>2</sub>, which make up a small fraction of the degradation products. Poly(benzyl acrylate), which also has no alkyl beta hydrogens, shows greater similarities in its degradation behaviour to PMA than to the higher alkyl polyacrylates. It degrades to give mainly chain fragments, but there is in this case a substantial yield of benzyl alcohol, as well as a small amount of CO<sub>2</sub>.</p> <ul style="list-style-type: none"> <li>▶ Esters react with acids to liberate heat along with alcohols and acids.</li> <li>▶ Strong oxidising acids may cause a vigorous reaction with esters that is sufficiently exothermic to ignite the reaction products.</li> <li>▶ Heat is also generated by the interaction of esters with caustic solutions.</li> <li>▶ Flammable hydrogen is generated by mixing esters with alkali metals and hydrides.</li> <li>▶ Esters may be incompatible with aliphatic amines and nitrates.</li> </ul> <p>None known</p>

## SECTION 8 Exposure controls / personal protection

### Control parameters

#### Occupational Exposure Limits (OEL)

#### INGREDIENT DATA

Not Available

#### Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	13 mg/m <sup>3</sup>	140 mg/m <sup>3</sup>	840 mg/m <sup>3</sup>
propylene glycol	30 mg/m <sup>3</sup>	1,300 mg/m <sup>3</sup>	7,900 mg/m <sup>3</sup>
5-chloro-2-methyl-4-isothiazolin-3-one	0.6 mg/m <sup>3</sup>	6.6 mg/m <sup>3</sup>	40 mg/m <sup>3</sup>

Continued...

ARDEX 330 Concrete Sealer

Ingredient	Original IDLH	Revised IDLH
ethylmethacrylate,/methacrylic acid/ethyl acrylate polymer, ammonium salt	Not Available	Not Available
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available	Not Available
propylene glycol	Not Available	Not Available
sodium lauryl ether sulfate	Not Available	Not Available
5-chloro-2-methyl-4-isothiazolin-3-one	Not Available	Not Available
water	Not Available	Not Available


Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
propylene glycol	E	≤ 0.1 ppm
sodium lauryl ether sulfate	E	≤ 0.01 mg/m <sup>3</sup>
5-chloro-2-methyl-4-isothiazolin-3-one	E	≤ 0.01 mg/m <sup>3</sup>
<b>Notes:</b>	<i>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.</i>	

Exposure controls

<b>Appropriate engineering controls</b>	<p>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.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.</p> <p>Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.</p> <p>An approved self contained breathing apparatus (SCBA) may be required in some situations.</p> <p>Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.</p>										
	<table border="1" style="width: 100%;"> <thead> <tr> <th>Type of Contaminant:</th> <th>Air Speed:</th> </tr> </thead> <tbody> <tr> <td>solvent, vapours, degreasing etc., evaporating from tank (in still air).</td> <td>0.25-0.5 m/s (50-100 f/min.)</td> </tr> <tr> <td>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</td> <td>0.5-1 m/s (100-200 f/min.)</td> </tr> <tr> <td>direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</td> <td>1-2.5 m/s (200-500 f/min.)</td> </tr> <tr> <td>grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).</td> <td>2.5-10 m/s (500-2000 f/min.)</td> </tr> </tbody> </table>	Type of Contaminant:	Air Speed:	solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)
	Type of Contaminant:	Air Speed:									
	solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)									
	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)									
	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)									
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)									
	<p>Within each range the appropriate value depends on:</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Lower end of the range</th> <th>Upper end of the range</th> </tr> </thead> <tbody> <tr> <td>1: Room air currents minimal or favourable to capture</td> <td>1: Disturbing room air currents</td> </tr> <tr> <td>2: Contaminants of low toxicity or of nuisance value only.</td> <td>2: Contaminants of high toxicity</td> </tr> <tr> <td>3: Intermittent, low production.</td> <td>3: High production, heavy use</td> </tr> <tr> <td>4: Large hood or large air mass in motion</td> <td>4: Small hood-local control only</td> </tr> </tbody> </table>	Lower end of the range	Upper end of the range	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity	3: Intermittent, low production.	3: High production, heavy use	4: Large hood or large air mass in motion	4: Small hood-local control only
	Lower end of the range	Upper end of the range									
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents									
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity										
3: Intermittent, low production.	3: High production, heavy use										
4: Large hood or large air mass in motion	4: Small hood-local control only										
<p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p>											

ARDEX 330 Concrete Sealer

<p><b>Individual protection measures, such as personal protective equipment</b></p>	
<p><b>Eye and face protection</b></p>	<ul style="list-style-type: none"> <li>▶ Safety glasses with side shields.</li> <li>▶ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]</li> <li>▶ 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. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. 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].</li> </ul>
<p><b>Skin protection</b></p>	<p>See Hand protection below</p>
<p><b>Hands/feet protection</b></p>	<ul style="list-style-type: none"> <li>▶ Wear chemical protective gloves, e.g. PVC.</li> <li>▶ Wear safety footwear or safety gumboots, e.g. Rubber</li> </ul> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.</li> </ul> <p>For esters:</p> <ul style="list-style-type: none"> <li>▶ Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials.</li> </ul> <p>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.</p> <p>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.</p> <p>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p> <p>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:</p> <ul style="list-style-type: none"> <li>· frequency and duration of contact,</li> <li>· chemical resistance of glove material,</li> <li>· glove thickness and</li> <li>· dexterity</li> </ul> <p>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</p> <ul style="list-style-type: none"> <li>· When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>· When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>· Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.</li> <li>· Contaminated gloves should be replaced.</li> </ul> <p>As defined in ASTM F-739-96 in any application, gloves are rated as:</p> <ul style="list-style-type: none"> <li>· Excellent when breakthrough time &gt; 480 min</li> <li>· Good when breakthrough time &gt; 20 min</li> <li>· Fair when breakthrough time &lt; 20 min</li> <li>· Poor when glove material degrades</li> </ul> <p>For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.</p> <p>It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.</p> <p>Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers technical data should always be taken into account to ensure selection of the most appropriate glove for the task.</p> <p>Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:</p> <ul style="list-style-type: none"> <li>· Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.</li> <li>· Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential</li> </ul> <p>Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p> <ul style="list-style-type: none"> <li>▶ Butyl rubber gloves</li> <li>· Nitrile rubber gloves (Note: Nitric acid penetrates nitrile gloves in a few minutes.)</li> </ul>
<p><b>Body protection</b></p>	<p>See Other protection below</p>
<p><b>Other protection</b></p>	<ul style="list-style-type: none"> <li>▶ Overalls.</li> <li>▶ P.V.C apron.</li> <li>▶ Barrier cream.</li> <li>▶ Skin cleansing cream.</li> <li>▶ Eye wash unit.</li> </ul>

**Recommended material(s)**

**GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:

**Respiratory protection**

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

Continued...

**"Forsberg Clothing Performance Index".**

The effect(s) of the following substance(s) are taken into account in the

**computer-generated** selection:

ARDEX 330 Concrete Sealer

Material	CPI
BUTYL	C
NATURAL RUBBER	C
NEOPRENE	C
PE/EVAL/PE	C
PVA	C
VITON	C

\* 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.

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1 P2	-
up to 50	1000	-	A-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	A-2 P2
up to 100	10000	-	A-3 P2
100+			Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand

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 = Sulfur dioxide(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), 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

<b>Appearance</b>	Milky very low viscosity liquid with mild odour; disperses with water.		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	~1 @25C
<b>Odour</b>	Slight	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Applicable
<b>pH (as supplied)</b>	7-8	<b>Decomposition temperature (°C)</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Applicable	<b>Viscosity (cSt)</b>	<500 @25C
<b>Initial boiling point and boiling range (°C)</b>	Not Available	<b>Molecular weight (g/mol)</b>	Not Applicable
<b>Flash point (°C)</b>	Not Applicable	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Applicable	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Applicable	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	Not Applicable	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water</b>	Miscible	<b>pH as a solution (1%)</b>	Not Available
<b>Vapour density (Air = 1)</b>	Not Available	<b>VOC g/L</b>	Not Available

Continued...

## SECTION 10 Stability and reactivity

<b>Reactivity</b>	See section 7
<b>Chemical stability</b>	<ul style="list-style-type: none"> <li>▸ Unstable in the presence of incompatible materials.</li> <li>▸ Product is considered stable.</li> <li>▸ Hazardous polymerisation will not occur.</li> </ul>
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

## SECTION 11 Toxicological information

### Information on toxicological effects

<b>Inhaled</b>	<p>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.</p> <p>Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.</p> <p>The main effects of simple esters are irritation, stupor and insensibility. Headache, drowsiness, dizziness, coma and behavioural changes may occur.</p>
<b>Ingestion</b>	<p>Accidental ingestion of the material may be damaging to the health of the individual.</p> <p>High molecular weight material; on single acute exposure would be expected to pass through gastrointestinal tract with little change / absorption. Occasionally accumulation of the solid material within the alimentary tract may result in formation of a bezoar (concretion), producing discomfort.</p> <p>Taken by mouth, isothiazolinones have moderate to high toxicity. The major signs of toxicity are severe stomach irritation, lethargy, and inco-ordination.</p> <p>The main effects of simple esters are irritation, stupor and insensibility. Headache, drowsiness, dizziness, coma and behavioural changes may occur.</p>
<b>Skin Contact</b>	<p>The material may accentuate any pre-existing dermatitis condition</p> <p>Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>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.</p> <p>Solutions of isothiazolinones may be irritating or even damaging to the skin, depending on concentration. A concentration of over 0.1% can irritate, and over 0.5% can cause severe irritation.</p> <p>There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.</p>
<b>Eye</b>	<p>Solutions containing isothiazolinones may damage the mucous membranes and cornea. Animal testing showed very low concentrations (under 0.1%) did not cause irritation, while higher levels (3-5.5%) produced severe irritation and damage to the eye.</p> <p>There is some evidence to suggest that this material can cause eye irritation and damage in some persons.</p>
<b>Chronic</b>	<p>Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.</p> <p>This product contains a polymer with a functional group considered to be of high concern. Pendant acrylates are irritating (cause increased sensitivity) and some species, such as ethyl acrylate may cause cancer.</p> <p>This material contains a substantial amount of polymer considered to be of low concern. These are classified under having MWs of between 1000 to 10000 with less than 25% of molecules with MWs under 1000 and less than 10% under 500; or having a molecular weight average of over 10000.</p> <p>The isothiazolinones are known contact sensitisers. Sensitisation is more likely with the chlorinated species as opposed to the non-chlorinated species.</p>

<b>ARDEX 330 Concrete Sealer</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>ethylmethacrylate/methacrylic acid/ethyl acrylate polymer, ammonium salt</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (Guinea Pig) LD50: >19 mg/kg <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>
	Oral (Rat) LD50: >3200 mg/kg <sup>[2]</sup>	Eyes - Moderate irritant *
		Skin - Slight irritant *
		Skin (rabbit): mild ***
		Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>propylene glycol</b>	<b>TOXICITY</b>	<b>IRRITATION</b>

Continued...



	Dermal (rabbit) LD50: 11890 mg/kg <sup>[2]</sup>	Eye (rabbit): 100 mg - mild
	Inhalation (Rat) LC50: >44.9 mg/l4h <sup>[1]</sup>	Eye (rabbit): 500 mg/24h - mild
	Oral (Rat) LD50: 20000 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>
sodium lauryl ether sulfate	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (Rat) LD50: 1600 mg/kg <sup>[2]</sup>	Eye: adverse effect observed (irreversible damage) <sup>[1]</sup>
		Eye: adverse effect observed (irritating) <sup>[1]</sup>
		Skin (rabbit):25 mg/24 hr moderate
		Skin: adverse effect observed (irritating) <sup>[1]</sup>
5-chloro-2-methyl-4-isothiazolin-3-one	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (rat) LD50: >1008 mg/kg <sup>[2]</sup>	Eye: adverse effect observed (irreversible damage) <sup>[1]</sup>
	Inhalation (Rat) LC50: 1.23 mg/l4h <sup>[2]</sup>	Skin: adverse effect observed (corrosive) <sup>[1]</sup>
	Oral (Rat) LD50: 53 mg/kg <sup>[2]</sup>	Skin: adverse effect observed (irritating) <sup>[1]</sup>
water	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (Rat) LD50: >90000 mg/kg <sup>[2]</sup>	Not Available

**Legend:**

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE	Not a skin sensitiser (guinea pig, Magnusson-Kligman) *** Ames Test: negative *** Micronucleus, mouse: negative *** Not mutagenic *** No effects on fertility or foetal development seen in the rat *** * [SWIFT] ** [Eastman] *** [Perstop]
PROPYLENE GLYCOL	<p>The acute oral toxicity of propylene glycol is very low; large amounts are needed to cause perceptible health damage in humans. Serious toxicity generally occurs only at blood concentrations over 1 g/L, which requires extremely high intake over a relatively short period of time; this is nearly impossible with consuming foods or supplements which contain 1g/kg of PG at most. Poisonings are usually due to injection through a vein or accidental swallowing of large amounts by children. The potential for long-term oral toxicity is also low.</p> <p>Prolonged contact with propylene glycol is essentially non-irritating to the skin. Undiluted propylene glycol is minimally irritating to the eye, and can produce a slight, temporary inflammation of the conjunctiva. Exposure to mists may cause irritation of both the eye and the upper airway. Inhalation of propylene glycol vapours may be irritating to some individuals. It is therefore recommended that propylene glycol not be used in applications where inhalation exposure or human eye contact with the spray mists of these materials is likely, such as fogs for theatrical productions or antifreeze solutions for emergency eye wash stations. Propylene glycol is metabolized in humans to pyruvic acid, acetic acid, lactic acid and propionaldehyde; the last of which is potentially hazardous.</p> <p>Propylene glycol shows no evidence of causing cancer or genetic toxicity.</p> <p>Research has suggested that individuals who cannot tolerate propylene glycol probably experience a special form of irritation, but they only rarely develop allergic contact dermatitis. Other investigators believe that the incidence of allergic contact dermatitis in people exposed to propylene glycol may be greater than 2% in patients with eczema.</p> <p>One study strongly suggests a connection between airborne concentrations of propylene glycol in houses and development of asthma and allergic reactions, such as inflammation of the nose and hives, in children.</p> <p>Another study suggested that the concentration of PGEs (propylene glycol and glycol ethers) in indoor air is linked to increased risk of developing numerous respiratory and immune disorders in children, including asthma, hay fever, eczema and allergies, with increased risk ranging from 50% to 180%. This concentration has been linked to use of water-based paints and water-based system cleansers.</p> <p>Patients with bladder inflammation and vulvodynia (chronic pain of the vulva) may be especially sensitive to propylene glycol. Women suffering with yeast infections may notice that some over the counter creams cause intense burning. Post-menopausal women who require the use of an oestrogen cream may notice that creams made with propylene glycol often cause extremely uncomfortable burning along the vulva and around the anus. Some electronic cigarette users who inhale propylene glycol vapour may experience dryness of the throat or shortness of breath.</p> <p>Adverse responses to administration of drugs which use propylene glycol as an excipient have been seen in a number of people especially at high doses. These include low blood pressure, slow heart rate, ECG abnormalities, heartbeat irregularities, lactic acidosis, breakdown of red cells and cardiac arrest.</p>
SODIUM LAURYL ETHER SULFATE	<p>* [CESIO]</p> <p>Polyethers (such as ethoxylated surfactants and polyethylene glycols) are highly susceptible to being oxidized in the air. They then form complex mixtures of oxidation products.</p> <p>Animal testing reveals that whole the pure, non-oxidised surfactant is non-sensitizing, many of the oxidation products are sensitizers. The oxidation products also cause irritation.</p> <p>Alcohol ethoxysulfates (AES) are of low acute toxicity. Neat AES are irritant to the skin and eyes.</p>

Continued...

	The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
<b>5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE</b>	<p>Considered to be the major sensitiser in Kathon CG (1) (1). Bruze et al - Contact Dermatitis 20: 219-39, 1989</p> <p>The following information refers to contact allergens as a group and may not be specific to this product.</p> <p>Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.</p> <p>Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. 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. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.</p> <p>Based on laboratory and animal testing, exposure to the material may result in irreversible effects and mutations in humans.</p> <p>In light of potential adverse effects, and to ensure a harmonised risk assessment and management, the EU regulatory framework for biocides has been established with the objective of ensuring a high level of protection of human and animal health and the environment. To this aim, it is required that risk assessment of biocidal products is carried out before they can be placed on the market. A central element in the risk assessment of the biocidal products are the utilization instructions that defines the dosage, application method and amount of applications and thus the exposure of humans and the environment to the biocidal substance. Humans may be exposed to biocidal products in different ways in both occupational and domestic settings. Many biocidal products are intended for industrial sectors or professional uses only, whereas other biocidal products are commonly available for private use by non-professional users. In addition, potential exposure of non-users of biocidal products (i.e. the general public) may occur indirectly via the environment, for example through drinking water, the food chain, as well as through atmospheric and residential exposure. Particular attention should be paid to the exposure of vulnerable sub-populations, such as the elderly, pregnant women, and children. Also pets and other domestic animals can be exposed indirectly following the application of biocidal products. Furthermore, exposure to biocides may vary in terms of route (inhalation, dermal contact, and ingestion) and pathway (food, drinking water, residential, occupational) of exposure, level, frequency and duration.</p> <p>Formaldehyde generators (releasers) are often used as preservatives. The maximum authorised concentration of free formaldehyde is 0.2% and must be labelled with the warning sign "contains formaldehyde" where the concentration exceeds 0.05%. The use of formaldehyde-releasing preservatives ensures that the level of free formaldehyde in the products is always low but sufficient to inhibit microbial growth - it disrupts metabolism to cause death of the organism. However there is a concern that formaldehyde generators can produce amines capable of causing cancers (nitrosamines) when used in formulations containing amines.</p>
<b>2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE &amp; 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE</b>	The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
<b>2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE &amp; PROPYLENE GLYCOL &amp; 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE</b>	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
<b>SODIUM LAURYL ETHER SULFATE &amp; 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE &amp; WATER</b>	No significant acute toxicological data identified in literature search.

<b>Acute Toxicity</b>	✘	<b>Carcinogenicity</b>	✘
<b>Skin Irritation/Corrosion</b>	✘	<b>Reproductivity</b>	✘
<b>Serious Eye Damage/Irritation</b>	✘	<b>STOT - Single Exposure</b>	✘
<b>Respiratory or Skin sensitisation</b>	✔	<b>STOT - Repeated Exposure</b>	✘
<b>Mutagenicity</b>	✘	<b>Aspiration Hazard</b>	✘

**Legend:** ✘ – Data either not available or does not fill the criteria for classification  
✔ – Data available to make classification

## SECTION 12 Ecological information

### Toxicity

ARDEX 330 Concrete Sealer	Endpoint	Test Duration (hr)	Species	Value	Source
---------------------------	----------	--------------------	---------	-------	--------

Continued...

## ARDEX 330 Concrete Sealer

	Not Available	Not Available	Not Available	Not Available	Not Available
ethylmethacrylate,/methacrylic acid/ethyl acrylate polymer, ammonium salt	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	Not Available	Not Available	Not Available	Not Available	Not Available
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	EC50	72h	Algae or other aquatic plants	15mg/l	Not Available
	NOEC(ECx)	72h	Algae or other aquatic plants	3.28mg/l	1
	LC50	96h	Fish	16mg/l	Not Available
	EC50	48h	Crustacea	>19mg/l	2
propylene glycol	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	NOEC(ECx)	336h	Algae or other aquatic plants	<5300mg/l	1
	EC50	96h	Algae or other aquatic plants	19000mg/l	2
	EC50	72h	Algae or other aquatic plants	19300mg/l	2
	EC50	48h	Crustacea	>114.4mg/L	4
sodium lauryl ether sulfate	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	NOEC(ECx)	48h	Fish	0.26mg/L	5
	EC50	48h	Crustacea	2.43-4.01mg/l	4
5-chloro-2-methyl-4-isothiazolin-3-one	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	LC50	96h	Fish	0.13-0.31mg/L	4
	NOEC(ECx)	504h	Crustacea	0.172mg/l	1
	EC50	72h	Algae or other aquatic plants	0.018-0.026mg/L	4
	EC50	96h	Algae or other aquatic plants	0.03-0.13mg/L	4
	EC50	48h	Crustacea	4.71mg/l	1
water	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	Not Available	Not Available	Not Available	Not Available	Not Available

**Legend:** Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 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
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW	LOW
propylene glycol	LOW	LOW
5-chloro-2-methyl-4-isothiazolin-3-one	HIGH	HIGH
water	LOW	LOW

### Bioaccumulative potential

Ingredient	Bioaccumulation
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (LogKOW = 2.9966)
propylene glycol	LOW (BCF = 1)
5-chloro-2-methyl-4-isothiazolin-3-one	LOW (LogKOW = 0.0444)

Continued...

ARDEX 330 Concrete Sealer

**Mobility in soil**

Ingredient	Mobility
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (Log KOC = 22.28)
propylene glycol	HIGH (Log KOC = 1)
5-chloro-2-methyl-4-isothiazolin-3-one	LOW (Log KOC = 45.15)

**SECTION 13 Disposal considerations**

**Waste treatment methods**

Product / Packaging disposal	
	<ul style="list-style-type: none"> <li>▶ <b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>▶ It may be necessary to collect all wash water for treatment before disposal.</li> <li>▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>▶ Where in doubt contact the responsible authority.</li> <li>▶ Recycle wherever possible.</li> <li>▶ 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.</li> <li>▶ 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).</li> <li>▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.</li> </ul>

**SECTION 14 Transport information**

**Labels Required**

Marine Pollutant	
	NO

**Land transport (UN): 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**

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

Not Applicable

**14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code**

Product name	Group
ethylmethacrylate./methacrylic acid/ethyl acrylate polymer, ammonium salt	Not Available
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available
propylene glycol	Not Available
sodium lauryl ether sulfate	Not Available
5-chloro-2-methyl-4-isothiazolin-3-one	Not Available
water	Not Available

**14.7.3. Transport in bulk in accordance with the IGC Code**

Product name	Ship Type
ethylmethacrylate./methacrylic acid/ethyl acrylate polymer, ammonium salt	Not Available
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available
propylene glycol	Not Available
sodium lauryl ether sulfate	Not Available
5-chloro-2-methyl-4-isothiazolin-3-one	Not Available

Product name	Ship Type
water	Not Available

## SECTION 15 Regulatory information

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

ethylmethacrylate,/methacrylic acid/ethyl acrylate polymer, ammonium salt is found on the following regulatory lists

Not Applicable

2,2,4-trimethyl-1,3-pentanediol monoisobutyrate is found on the following regulatory lists

Not Applicable

propylene glycol is found on the following regulatory lists

Not Applicable

sodium lauryl ether sulfate is found on the following regulatory lists

Not Applicable

5-chloro-2-methyl-4-isothiazolin-3-one is found on the following regulatory lists

Not Applicable

water is found on the following regulatory lists

Not Applicable

### Additional Regulatory Information

Not Applicable

### National Inventory Status

National Inventory	Status
Australia - AIIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (ethylmethacrylate,/methacrylic acid/ethyl acrylate polymer, ammonium salt; 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate; propylene glycol; sodium lauryl ether sulfate; 5-chloro-2-methyl-4-isothiazolin-3-one; water)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (ethylmethacrylate,/methacrylic acid/ethyl acrylate polymer, ammonium salt)
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (ethylmethacrylate,/methacrylic acid/ethyl acrylate polymer, ammonium salt; sodium lauryl ether sulfate)
Vietnam - NCI	Yes
Russia - FBEPH	No (ethylmethacrylate,/methacrylic acid/ethyl acrylate polymer, ammonium salt)
<b>Legend:</b>	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	11/06/2024
Initial Date	11/06/2024

### 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.

### 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 Governmental Industrial Hygienists
  - ▶ STEL: Short Term Exposure Limit
  - ▶ TEEL: Temporary Emergency Exposure Limit,
  - ▶ IDLH: Immediately Dangerous to Life or Health Concentrations
  - ▶ ES: Exposure Standard
  - ▶ OSF: Odour Safety Factor
  - ▶ NOAEL: No Observed Adverse Effect Level
  - ▶ LOAEL: Lowest Observed Adverse Effect Level
  - ▶ TLV: Threshold Limit Value
  - ▶ LOD: Limit Of Detection
  - ▶ OTV: Odour Threshold Value
  - ▶ BCF: BioConcentration Factors
  - ▶ BEI: Biological Exposure Index
  - ▶ DNEL: Derived No-Effect Level
  - ▶ PNEC: Predicted no-effect concentration
- 
- ▶ AIIC: Australian Inventory of Industrial Chemicals
  - ▶ DSL: Domestic Substances List
  - ▶ NDSL: Non-Domestic Substances List
  - ▶ IECSC: Inventory of Existing Chemical Substance in China
  - ▶ EINECS: European INventory of Existing Commercial chemical Substances
  - ▶ ELINCS: European List of Notified Chemical Substances
  - ▶ NLP: No-Longer Polymers
  - ▶ ENCS: Existing and New Chemical Substances Inventory
  - ▶ KECI: Korea Existing Chemicals Inventory
  - ▶ NZIoC: New Zealand Inventory of Chemicals
  - ▶ PICCS: Philippine Inventory of Chemicals and Chemical Substances
  - ▶ TSCA: Toxic Substances Control Act
  - ▶ TCSI: Taiwan Chemical Substance Inventory
  - ▶ INSQ: Inventario Nacional de Sustancias Químicas
  - ▶ NCI: National Chemical Inventory
  - ▶ FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH.

TEL (+61 3) 9572 4700.