



SAFETY DATA SHEET DOWSIL IE 2404 EMULSION

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

1.1. Product identifier

Product name	DOWSIL IE 2404 EMULSION
Product number	64707
Synonyms; trade names	DOW CORNING IE 2404 EMULSION

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

Identified uses	Surface coating household cleaning Impregnation Agents Textiles Leather treatment
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	64707

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Hazard statements	EUH208 Contains 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1). May produce an allergic reaction.
Supplemental label information	EUH210 Safety data sheet available on request.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

DOWSIL IE 2404 EMULSION**3.2. Mixtures**

METHANOL			>= 0.29 - <= 1.5 %
CAS number: 67-56-1	EC number: 200-659-6	REACH registration number: 01-2119433307-44-XXXX	
Acute Toxicity Estimate (oral): 100 mg/l, Oral, Acute Toxicity Estimate (dermal): 300 mg/kg, Dermal, Acute Toxicity Estimate (inhalation): 3 mg/l, , Vapour STOT SE 1 - H370 ≥ 10 % STOT SE 2 - H371 ≥ 3 - < 10 %			
Classification Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370			

MONOPROPYLENE GLYCOL			>= 0.5 - <= 1.5 %
CAS number: 57-55-6	EC number: 200-338-0	REACH registration number: 01-2119456809-23-XXXX	
ATE: Acute Toxicity Estimate.Oral> 20000mg/kg ATE: Acute Toxicity Estimate.Dermal> 2000mg/kg ATE: Acute Toxicity Estimate.Inhalation317.042mg/l2hourDust/Mist			
Classification Not Classified			

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5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

$\geq 0.0003 - \leq 0.001 \%$

CAS number: 55965-84-9

EC number: 611-341-5

REACH registration number: 01-2120764691-48-XXXX

M factor (Acute) = 100

M factor (Chronic) = 100

ATE: Acute Toxicity Estimate.Oral64mg/kg

ATE: Acute Toxicity Estimate.Dermal92.4mg/kg

ATE: Acute Toxicity Estimate.Inhalation0.171mg/l4hourDust/Mist

Skin Corr. 1C

$\geq 0.6\%$

Skin Irrit. 2 - H315

0.06 - < 0.6 %

Eye Irrit. 2 - H319

0.06 - < 0.6 %

Skin Sens. 1A - H317

$\geq 0.0015 \%$

Eye Dam. 1 - H318

$\geq 0.6 \%$

Classification

Acute Tox. 3 - H301

Acute Tox. 2 - H310

Acute Tox. 2 - H330

Skin Corr. 1C - H314

Eye Dam. 1 - H318

Skin Sens. 1A - H317

Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

Composition comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aid personnel should wear appropriate protective equipment during any rescue. Wear protective clothing as described in Section 8 of this safety data sheet.

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.

Skin contact

Remove affected person from source of contamination. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Continue to rinse for at least 15 minutes. Wash clothing and clean shoes thoroughly before reuse. Get medical attention if any discomfort continues. Provide shower facilities near the workplace.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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4.2. Most important symptoms and effects, both acute and delayed

Skin contact	The product contains a small amount of sensitising substance. May cause skin sensitisation or allergic reactions in sensitive individuals.
Eye contact	May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	If several ounces (60 - 100 ml) of ethylene glycol have been ingested, early administration of ethanol may counter the toxic effects (metabolic acidosis, renal damage). Consider hemodialysis or peritoneal dialysis & thiamine 100 mg plus pyridoxine 50 mg intravenously every 6 hours. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol (EG), di- or triethylene glycol (DEG, TEG), ethylene glycol butyl ether (EGBE), or methanol intoxication if available. Fomepizole protocol: loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, TEG or EGBE are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Maintain adequate ventilation and oxygenation of the patient. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	When heated and in case of fire, toxic vapours/gases may be formed.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Methanol. Acetic acid. Oxides of the following substances: Carbon. Silicon.

5.3. Advice for firefighters

Protective actions during firefighting	No action shall be taken without appropriate training or involving any personal risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Do not use water jet as an extinguisher, as this will spread the fire. Contain and collect extinguishing water. Avoid the spillage or runoff entering drains, sewers or watercourses. Evacuate area.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Avoid spilling. Avoid release to the environment. Observe good chemical hygiene practices. Product residues retained in emptied containers can be hazardous.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Only store in correctly labelled containers. Store away from the following materials: Strong oxidising agents.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk

MONOPROPYLENE GLYCOL

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

Ingredient comments Observe any occupational exposure limits for the product or ingredients.

METHANOL (CAS: 67-56-1)

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DNEL

Workers - Inhalation; Long term systemic effects: 130 mg/m³
 Workers - Inhalation; Short term systemic effects: 130 mg/m³
 Workers - Inhalation; Long term local effects: 130 mg/m³
 Workers - Inhalation; Short term local effects: 130 mg/m³
 Workers - Dermal; Long term systemic effects: 20 mg/m³
 Workers - Dermal; Long term systemic effects: 20 mg/kg/day
 General population - Inhalation; Long term systemic effects: 26 mg/m³
 General population - Inhalation; Short term systemic effects: 26 mg/m³
 General population - Inhalation; Long term local effects: 26 mg/m³
 General population - Inhalation; Short term local effects: 26 mg/m³
 General population - Dermal; Long term systemic effects: 5 mg/kg/day
 General population - Dermal; Short term systemic effects: 5 mg/kg/day
 General population - Oral; Long term systemic effects: 5 mg/kg/day
 General population - Oral; Short term systemic effects: 5 mg/kg/day

DMEL Workers - Dermal; Long term systemic effects: 40 mg/kg/day

PNEC

- Fresh water; 20.8 mg/l
- marine water; 2.08 mg/l
- Intermittent release; 1540 mg/l
- STP; 100 mg/l
- Sediment (Freshwater); 77 mg/kg
- Sediment (Marinewater); 7.7 mg/kg
- Soil; 100 mg/kg

MONOPROPYLENE GLYCOL (CAS: 57-55-6)

DNEL

General population - Inhalation; Long term systemic effects: 50 mg/m³
 General population - Inhalation; Long term local effects: 10 mg/m³
 Workers - Inhalation; Long term systemic effects: 168 mg/m³
 Workers - Inhalation; Long term local effects: 10 mg/m³
 General population - Dermal; Long term systemic effects: 213 mg/m³
 General population - Oral; Long term systemic effects: 85 mg/m³

PNEC

- Fresh water; 260 mg/l
- marine water; 26 mg/l
- STP; 20000 mg/l
- Sediment (Freshwater); 572 mg/kg
- Sediment (Marinewater); 57.2 mg/kg
- Soil; 50 mg/kg
- Intermittent release; 183 mg/l

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1) (CAS: 55965-84-9)

DNEL

Workers - Inhalation; Long term local effects: 0.02 mg/m³
 Workers - Inhalation; Short term local effects: 0.04 mg/m³
 Consumer - Inhalation; Long term local effects: 0.02 mg/m³
 Consumer - Inhalation; Short term local effects: 0.04 mg/m³
 Consumer - Oral; Long term systemic effects: 0.09 mg/kg/day
 Consumer - Oral; Short term systemic effects: 0.11 mg/kg/day

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PNEC

Fresh water; 3.39 µg/l
 marine water; 3.39 µg/l
 STP; 0.23 mg/l
 Soil; 0.01 mg/kg/day
 Intermittent release; 3.39 µg/l
 Sediment (Freshwater); 0.027 mg/kg/day
 Sediment (Marinewater); 0.027 mg/kg/day

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 4 hours. Butyl rubber. Rubber (natural, latex). Neoprene. Nitrile rubber. Polyvinyl chloride (PVC). Thickness: 0.35 mm Do not use the following: Polyvinyl alcohol (PVA). To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Wear self-contained breathing apparatus. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	White. Milky.
Odour	Slight.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.

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Pour Point	No information available.
Freezing Point	Not determined.
Initial boiling point and range	100°C @ 760 mm Hg
Flash point	> 93.4°C Tag closed cup.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.02
Bulk density	No information available.
Solubility(ies)	Not determined.
Partition coefficient	Not determined.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	1000 mPa s @ 25°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.
<u>9.2. Other information</u>	
Other information	Not determined.
Refractive index	No information available.
Particle size	Not applicable.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

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Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product: Strong oxidising agents. Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Methanol. Acetic acid. Oxides of the following substances: Carbon. Silicon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Not determined.

ATE oral (mg/kg) 20,134.23

Acute toxicity - dermal

Notes (dermal LD₅₀) Not determined.

ATE dermal (mg/kg) 20,134.23

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

ATE inhalation (gases ppm) 46,979.87

ATE inhalation (vapours mg/l) 201.34

ATE inhalation (dusts/mists mg/l) 33.56

Skin corrosion/irritation

Skin corrosion/irritation Information given is applicable to the major ingredient. Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Information given is applicable to the major ingredient. May be slightly irritating to eyes.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

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Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Toxicokinetics

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin irritation should not occur when used as recommended. The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact

May cause temporary eye irritation.

Toxicological information on ingredients.

METHANOL

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. Gene mutation: Negative.

Genotoxicity - in vivo DNA damage and/or repair: Negative. Mouse

Carcinogenicity

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Carcinogenicity NOAEL 466 mg/kg/day, Oral, Rat

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development Embryotoxicity: - : , Oral, Mouse Negative. Fetotoxicity: - : , Oral, Mouse Positive.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 1 - H370

Target organs Central nervous system Eyes

Specific target organ toxicity - repeated exposure

STOT - repeated exposure LOAEL 2340 mg/kg, Oral, Monkey NOAEL 1.06 mg/l, Inhalation, Rat 90 days

Target organs Eyes Central nervous system

Aspiration hazard

Aspiration hazard No information available.

Toxicokinetics The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation Toxic by inhalation. Drowsiness, dizziness, disorientation, vertigo.

Ingestion Toxic if swallowed. May cause unconsciousness, blindness and possibly death.

Skin contact Toxic in contact with skin.

Eye contact May cause temporary eye irritation.

Target organs Kidneys Liver Heart & cardiovascular system

Medical considerations Liver and/or kidney damage.

MONOPROPYLENE GLYCOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 22,000.0

Species Rat

Notes (oral LD₅₀) LD₅₀ > 20000 mg/kg, Oral, Rat

ATE oral (mg/kg) 22,000.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ 41 mg/l, Inhalation, Rat

Skin corrosion/irritation

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Animal data Not irritating. Rabbit OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit OECD 405

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising. Guinea pig OECD 406

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties. Ames test Negative. OECD 473

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Toxicokinetics The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact May cause temporary eye irritation.

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 64.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 64 mg/kg, Oral, Rat Toxic if swallowed.

ATE oral (mg/kg) 64.0

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Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 92.4 mg/kg)

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 92.4 mg/kg, Dermal, Rabbit Fatal in contact with skin.

ATE dermal (mg/kg) 92.4

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 0.171

Species Rat

Notes (inhalation LC₅₀) LC₅₀ 0.171 mg/l, 4 hours, Dust/Mist Rat Fatal if inhaled.

ATE inhalation (dusts/mists mg/l) 0.171

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns. Rabbit OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns. Rabbit

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction. Guinea pig maximization test (GPMT) - Guinea pig: Sensitising. OECD 406

Germ cell mutagenicity

Genotoxicity - in vitro Inconclusive data.

Genotoxicity - in vivo Chromosome aberration: Negative. Rat
Chromosome aberration: Negative. Mouse
Micronucleus assay: Negative. Rat

Carcinogenicity

Carcinogenicity No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility Fertility - NOAEL 16.3 - 24.7 mg/kg, Oral, Rat P Fertility - NOAEL (90d) 16.3 - 24.7 mg/kg, Oral, Rat F1 Two-generation study, Fertility - NOAEL (P) 2.8 - 4.4, (F1) 22.7 - 28, (F2) 35.7 - 39.1 mg/kg, Oral, Rat

Reproductive toxicity - development Based on available data the classification criteria are not met. Developmental toxicity: - NOAEL: 15 mg/kg, Oral, Rat Maternal toxicity: - NOAEL: ≤ 3.95 mg/kg, Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure. NOAEL (90 d) 16.3 - 24.7 mg/kg, Oral, Rat NOAEL (91 d) ≤ 0.104 mg/kg, Dermal, Rat NOAEL (91 d) 0.00034 mg/l, Inhalation, Rat

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Toxicokinetics

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation

Fatal if inhaled.

Ingestion

Toxic if swallowed.

Skin contact

Fatal in contact with skin. Causes severe burns. May cause an allergic skin reaction.

Eye contact

Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

SECTION 12: Ecological information

Ecotoxicity

The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

METHANOL

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

MONOPROPYLENE GLYCOL

Ecotoxicity

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity

Not considered toxic to fish.

Ecological information on ingredients.

METHANOL

Acute aquatic toxicity

Acute toxicity - fish

LC50, 96 hours: 15400 mg/l, *Lepomis macrochirus* (Bluegill)
NOEC, 200 hour: 15800 mg/l, *Oryzias latipes* (Red killifish)
LC₅₀, 96 hour: > 100 mg/l, *Pimephales promelas* (Fat-head Minnow)

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 10000 mg/l, Daphnia magna EC ₅₀ , 96 hour: 22200 - 23400 mg/l, Freshwater invertebrates Daphnia obtusa - Neonate EC ₅₀ , 48 hour: 2500 mg/l, Marinewater invertebrates Crangon Crangon (Common sand shrimp)
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 22000 mg/l, Selenastrum capricornutum EC ₅₀ , 96 hour: 16.912 mg/l, Marinewater algae Ulva pertusa Chronic, NOEC, 96 hour: 9.96 mg/l, Marinewater algae Ulva pertusa
Acute toxicity - microorganisms	IC ₅₀ , 15 hour: 20000 mg/l, IC ₅₀ , 3 hour: > 1000 mg/l,

MONOPROPYLENE GLYCOL

Toxicity	Not considered toxic to fish.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 40613 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 96 hour: 55770 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 4000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 19000 mg/l, Scenedesmus subspicatus EC ₅₀ , 96 hour: 19100 mg/l, Skeletonema costatum NOEC, 96 hour: 15000 mg/l, Scenedesmus subspicatus NOEC, 14 day: < 5300 mg/l, Skeletonema costatum
Acute toxicity - microorganisms	NOEC, 18 hour: > 20000 mg/l, Pseudomonas putida
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 7 days: 13020 mg/l, Daphnia magna NOEC, 7 day: 29000 mg/l, Freshwater invertebrates Ceriodaphnia sp.

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Toxicity	Very toxic to aquatic life with long lasting effects.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.001 < L(E)C ₅₀ ≤ 0.01
M factor (Acute)	100
Acute toxicity - fish	EC ₅₀ , 96 hours: 0.22 mg/l, Oncorhynchus mykiss (Rainbow trout) OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.1 mg/l, Daphnia magna OECD 202

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Acute toxicity - aquatic plants	EC ₅₀ , 48 hours: 0.0052 mg/l, Skeletonema costatum (marine diatom) OECD 201 NOEC, 48 hour: 0.00049 mg/l, Skeletonema costatum (marine diatom) OECD 201
Acute toxicity - microorganisms	EC ₅₀ , 3 hour: 7.92 mg/l, Activated sludge OECD 209
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	100
Chronic toxicity - fish early life stage	NOEC, 28 days: 0.098 mg/l, Oncorhynchus mykiss (Rainbow trout) OCED 215
Chronic toxicity - aquatic invertebrates	NOEC, 21 day: 0.004 mg/l, Daphnia magna OECD 202

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

METHANOL

Persistence and degradability	The product is readily biodegradable.
Biodegradation	Water - Degradation (%) 71.5: 5 days Water - Degradation (%) 95: 20 days

MONOPROPYLENE GLYCOL

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	- Degradation >81%: 28 days OECD 301F - Degradation 96%: 64 days
Biological oxygen demand	BOD5: 1170 mg O ₂ /l
Chemical oxygen demand	4700 mg O ₂ /l

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- >60%: 28 days OECD 301D

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient Not determined.

Ecological information on ingredients.

DOWSIL IE 2404 EMULSION**METHANOL**

Bioaccumulative potential The product is not bioaccumulating. BCF: < 10, Leuciscus idus (Golden orfe)

Partition coefficient log Pow: -0.82 / -0.66

MONOPROPYLENE GLYCOL

Bioaccumulative potential The product is not bioaccumulating. BCF: < 0.09,

Partition coefficient log Pow: -1.07

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Bioaccumulative potential BCF: 3.6,

Partition coefficient log Pow: -0.71 - 0.75 OECD 107

12.4. Mobility in soil

Mobility Not determined.

Ecological information on ingredients.**METHANOL**

Mobility The product is soluble in water.

MONOPROPYLENE GLYCOL

Mobility The product is soluble in water.

Adsorption/desorption coefficient - Koc: 2.9 @ 20°C - Log Koc: 0.46 @ 20°C

Henry's law constant 0.00566 atm m³/mol @ 12°C

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Mobility No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.**METHANOL**

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

MONOPROPYLENE GLYCOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

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5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Ecological information on ingredients.

METHANOL

Cod 1.42

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

MONOPROPYLENE GLYCOL

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

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No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020

Restrictions (Annex XVII Regulation 1907/2006)

CAUTION - Chemical may be subject to REACH RESTRICTIONS - see Annex XVII. This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 69

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Classification procedures according to Regulation (EC) 1272/2008

EUH208: Calculation method. Not classified.: Calculation method.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

07/12/2022

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Version number	1.000
SDS number	64707
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H310 Fatal in contact with skin. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H331 Toxic if inhaled. H370 Causes damage to organs (Eyes, Central nervous system). H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. EUH208 Contains 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1). May produce an allergic reaction.
Signature	Lisa Bland

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Product Application Policy

To whom it may concern

Non-Supported Applications of Propylene Glycols (PGs)

For reasons of health and safety, regulatory compliance, and in accordance with internal policies **Univar Solutions**, will NOT supply Propylene Glycols (PGs) in a number of specific applications relating to pharmaceuticals, medicines, tobacco and tobacco products, marijuana products, food, feed, and dietary supplements. In order to maintain a high level of awareness amongst the customers, sales agents and distributors (including re-sellers and re-packagers) of **Univar Solutions**, we are writing to remind you of the non-supported applications for the Propylene Glycols (PGs). The use of such products is subject to the user's assessment of suitability, and compliance for its particular supplier-supported use. **Univar Solutions** will not support the applications listed in Annex 1 of this document.

Background

Based on a number of concerns and policies, including regulations to restrict product use, inappropriate exposure or contact and internal policies on specific application, **Univar Solutions** will not support Propylene Glycols (PGs) in the applications specified in Annex 1. We will not knowingly sample or sell these products for use in these non-supported applications, and will exit sales if necessary to support this position; however, we will make every effort to transition customers to appropriate products where possible.

General Non-Supported Applications

Product Scope:

All PG Products

The following identifies the applications that are generally, not supported by **Univar Solutions** for any Propylene Glycol (PG) product:

- Generation of artificial smoke/theatrical fogs/mists/artificial snow
- For use in the production of tobacco, the manufacture of tobacco products, the manufacture of electronic cigarettes or the manufacture of marijuana products
- Use as an active in pesticides¹
- Use as heat transfer fluids without inhibitors, including as an ingredient in fluids for warming or cooling foods or beverages or for heating an enclosed space where personnel exposure is possible²
- Manufacture of munitions or chemical weapons
- Ingredient in cat food

Notes

¹ **Univar Solutions** has not registered any PG product under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for use as an active ingredient in pesticide formulas.

² Contact the **Univar Solutions** for properly inhibited PG-based fluids for heat transfer applications.

Univar Solutions does not provide samples of or knowingly sell any PG product for use in any General Non-Supported Application, unless otherwise agreed to in writing.

Technical or Industrial Grade Non-Supported Applications

Product Scope:

All Technical and Industrial PG grades, including, but not limited to:

- PG Industrial Grade (PGI)
- PG Technical Grade (PG TG)
- Dipropylene Glycol Regular Grade (DPG)
- Tripropylene Glycol Regular Grade (TPG)

- Tripropylene Glycol Acrylate Grade (TPG Ac)
- PG-Highers

The following identifies the applications that are NOT supported (“Technical or Industrial Grade Non-Supported Applications”) by **Univar Solutions** for any technical or industrial grade PG product:

- Any sensitive applications, including, but not limited to, pharmaceutical, direct and indirect food contact, cosmetics, personal care, animal feed, and children’s toys.
- All applications listed previously as General Non-Supported Applications

Univar Solutions does not provide samples of or knowingly sell any PG product for use in any Technical or Industrial Grade Non-Supported Application, unless otherwise agreed to in writing.

Specialty Grade Supported Applications

The following section identifies certain sensitive applications that are supported (“Specialty Grade Supported Applications”) by **Univar Solutions** for specialty grade products^{3,4}

Product Scope:

- Propylene Glycol USP/EP
- Propylene Glycol USP/EP (PG USP/EP)

is supported by **Univar Solutions** for the following applications:

- Pharmaceutical excipients⁵,
- direct and indirect food contact,
- beverage,
- cosmetics,
- personal care applications and children’s toys,
- animal feed (except cat food)⁶

Product Scope:

- Dipropylene Glycol LO+ Grade (DPG LO+)

is supported by **Univar Solutions** for the following applications:

- Indirect food contact,
- Cosmetics/personal care and
- Children’s toys

Product Scope:

- Propylene Glycol Animal Feed (PG AF)

is supported by **Univar Solutions** for the following applications

- Animal feed (except cat food)⁶

Notes

³ Re-packaging any specialty grade PG product for re-sale requires prior written approval by **Univar Solutions**.

⁴ Specialty grade PG product names may vary by region.

⁵ **Univar Solutions** does not test any PG USP/EP product for suitability in human parenteral applications (i.e., applications intended for humans where the drug formulation is administered not through the gastrointestinal tract, but is typically administered as an injection or infusion) and, therefore, does not support sales into these applications, unless otherwise agreed to in writing. **Univar Solutions** does not apply Active Pharmaceutical Ingredient (“API”) Good Manufacturing Practice (GMP) and, therefore, does not support the use of any PG USP/EP product as an API, unless otherwise agreed to in writing.

⁶ Where PG AG is not available, PG USP/EP is the PG product supported for animal feed (except cat food).

In the event that a customer is using a PG product that is contrary to the information provided above, **Univar Solutions** reserves the right to exit product sales to that customer.

Univar Solutions strongly encourage their customers to review both their manufacturing processes and their applications of the aforementioned PG products from the standpoint of human health and environmental quality to ensure that such products are used only in applications for which they are intended or tested. To enter into new applications beyond the traditional standard use applications, contact your **Univar Solutions** representative to review the specific application with our supplier. As use conditions and applicable laws may differ from one location to another and may change with time, when **Univar Solutions** supports an application, **Univar Solutions** does not warrant and is not responsible for the use in such application.

Please note **Univar Solutions** warrants that the products supplied meet the agreed specification but does not offer warranties as to fitness for purpose. You, as a user, must rely on your own testing in order to ascertain fitness for your intended purpose. Should you have any questions or require further information, please contact your **Univar Solutions** representative.

Whilst this policy is distributed with the SDS, it is to be considered as a separate document.

Yours sincerely,
Univar Solutions
Product Stewardship