

### SAFETY DATA SHEET Prestone Anti Freeze Ready To Use ( RTU)

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product name	Prestone Anti Freeze Ready To Use (RTU)	
Product number	AF2100LD, AF2100LGBA, AF2100LFNL, PAFR0017A, PAFR0018A, PAFR0019A	
UFI	UFI: JTT5-T08A-S00R-GKCG	
REACH registration notes	This is a MIXTURE; no registration information contained in this document . Holts are classed as Downstream User.	
1.2. Relevant identified uses o	f the substance or mixture and uses advised against	
Identified uses	Antifreeze liquid.	
1.3. Details of the supplier of the	he safety data sheet	
Supplier	Holt Lloyd International Ltd Barton Dock Road Stretford Manchester M32 0YQ - England, UK +44 (0) 161 866 4800 FAX +44 (0) 161 866 4854 www.holtsauto.com	
Contact person	Contact Email address: info@holtsauto.com	
1.4. Emergency telephone nur	nber	
Emergency telephone	UK - 00 44 (0) 161 866 4800 Office hrs = 0900 - 1700 hrs	
National emergency telephone number	<ul> <li>National Poisons Information Service</li> <li>City Hospital, Birmingham B187QH, United Kingdom</li> <li>Telephone: +44 121 507 4123</li> <li>Email: allistervale@npis.org, sallybradberry@npis.org</li> </ul>	
	www.npis.org	
SECTION 2: Hazards identification		
2.1. Classification of the subst Classification (EC 1272/2008)	ance or mixture	
Physical hazards	Not Classified	
Health hazards	Acute Tox. 4 - H302 STOT RE 2 - H373	
Environmental hazards	Not Classified	

2.2. Label elements

1-5%

# Prestone Anti Freeze Ready To Use (RTU)

#### Hazard pictograms



•		
Signal word	Warning	
Hazard statements	H302 Harmful if swallowed. H373 May cause damage to organs (Kidneys) swallowed.	through prolonged or repeated exposure if
Precautionary statements	<ul> <li>P101 If medical advice is needed, have product container or label at hand.</li> <li>P102 Keep out of reach of children.</li> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P270 Do not eat, drink or smoke when using this product.</li> <li>P330 Rinse mouth.</li> <li>P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.</li> <li>P501 Dispose of contents/ container in accordance with local regulations.</li> </ul>	
UFI	UFI: JTT5-T08A-S00R-GKCG	
Contains	ETHANEDIOL	
2.3. Other hazards		
SECTION 3: Composition/info	ormation on ingredients	
3.2. Mixtures		
ETHANEDIOL		30-60%
CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 01- 2119456816-28-XXXX
Classification Acute Tox. 4 - H302 STOT RE 2 - H373		

2-Ethylhexanoic Acid		
CAS number: 149-57-5	EC number: 205-743-6	REACH registration number: 01-
		2119488942-23-XXXX

Classification

Repr. 2 - H361d

SODIUM HYDROXIDE			<1%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01- 2119457892-27-XXXX	
Classification			
Skin Corr. 1A - H314 Eye Dam. 1 - H318			

Neodecanoic acid			<19
CAS number: 26896-20-8	EC number: 248-093-9	REACH registration number: 01- 2119449554-33-XXXX	
Classification Not Classified			
sodium 4(or 5)-methyl-1H-benzot	riazolide		<19
CAS number: 64665-57-2	EC number: 265-004-9	REACH registration number: 01- 2119980062-42-XXXX	
Classification Acute Tox. 4 - H302			
Skin Corr. 1B - H314 Eye Dam. 1 - H318			
PROPAN-1-OL			<19
CAS number: 71-23-8	EC number: 200-746-9	REACH registration number: 01- 2119486761-29-XXXX	
<b>Classification</b> Flam. Liq. 2 - H225 Eye Dam. 1 - H318 STOT SE 3 - H336			
Polypropylene Glycol			<19
CAS number: 25322-69-4	EC number: 500-039-8	REACH registration number: 01- 2119457556-29-XXXX	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335			
Denatonium Benzoate			<19
CAS number: 3734-33-6	EC number: 223-095-2	REACH registration number: 01- 2120102843-65-XXXX	
Classification			
Acute Tox. 4 - H302			
Acute Tox. 4 - H332 Skin Irrit. 2 - H315			
Eye Dam. 1 - H318			
Aquatic Chronic 3 - H412			

D11014A CHROMATINT UR	ANINE CONC (Yellow)	<1%
CAS number: 518-47-8	EC number: 208-253-0	REACH registration number: 01- 2120115897-47-XXXX
Classification Not Classified		
The full text for all hazard state	ements is displayed in Section 16.	
SECTION 4: First aid measure	98	
4.1. Description of first aid me	asures	
Inhalation	fresh air and keep warm and at rest in a pos	Get medical attention. Move affected person to sition comfortable for breathing. When breathing is sist affected person by administering oxygen. Get s.
Ingestion	induce vomiting. Remove affected person fr to drink. Get medical attention immediately.	g by mouth to an unconscious person. Do not rom source of contamination. Give plenty of water Move affected person to fresh air and keep warm athing. Get medical attention if any discomfort
Skin contact	Remove contaminated clothing. Wash skin attention if irritation persists after washing.	thoroughly with soap and water. Get medical
Eye contact		ds wide apart. Rinse with water. Continue to rinse on promptly if symptoms occur after washing.
4.2. Most important symptoms	and effects, both acute and delayed	
General information	The severity of the symptoms described wil length of exposure.	I vary dependent on the concentration and the
Inhalation	This is unlikely to occur but symptoms simil	ar to those of ingestion may develop.
Ingestion	Harmful if swallowed. May cause liver and/o	or renal damage.
Skin contact	May be slightly irritating to skin. Prolonged	skin contact may cause redness and irritation.
Eye contact	May be slightly irritating to eyes. Prolonged	contact may cause redness and/or tearing.
4.3. Indication of any immedia	te medical attention and special treatment ne	eded
Notes for the doctor	Treat symptomatically.	
SECTION 5: Firefighting meas	sures	
5.1. Extinguishing media		
Suitable extinguishing media	The product is not flammable. Use fire-extin	nguishing media suitable for the surrounding fire.
5.2. Special hazards arising fr	om the substance or mixture	
Specific hazards	Thermal decomposition or combustion prod and corrosive gases or vapours.	ucts may include the following substances: Toxic
Hazardous combustion products	Oxides of carbon. Oxides of nitrogen.	
5.3. Advice for firefighters Protective actions during firefighting	Fight fire with normal precautions from a rea	asonable distance.

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

### 6.1. Personal precautions, protective equipment and emergency procedures Avoid contact with skin, eyes and clothing. Wear protective clothing as described in Section 8 Personal precautions of this safety data sheet. 6.2. Environmental precautions Avoid release to the environment. Do not discharge into drains or watercourses or onto the **Environmental precautions** ground. The product is miscible with water and may spread in water systems. 6.3. Methods and material for containment and cleaning up Methods for cleaning up 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. For waste disposal, see Section 13. 6.4. Reference to other sections SECTION 7: Handling and storage 7.1. Precautions for safe handling Usage precautions Avoid spilling. Avoid contact with skin and eyes. Do not handle broken packages without protective equipment. 7.2. Conditions for safe storage, including any incompatibilities Keep away from food, drink and animal feeding stuffs. Store in tightly-closed, original Storage precautions container in a dry, cool and well-ventilated place. Keep only in the original container. Storage class Chemical storage. 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

ETHANEDIOL Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m<sup>3</sup> vapour Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m<sup>3</sup> vapour Sk

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate  $\ensuremath{\mathsf{Sk}}$ 

#### SODIUM HYDROXIDE

Long-term exposure limit (8-hour TWA): WEL Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

#### **PROPAN-1-OL**

Long-term exposure limit (8-hour TWA): WEL 200 ppm(Sk) 500 mg/m3(Sk) Short-term exposure limit (15-minute): WEL 250 ppm(Sk) 625 mg/m3(Sk) WEL = Workplace Exposure Limit. Sk = Can be absorbed through the skin.

#### ETHANEDIOL (CAS: 107-21-1)

Ingredient comments WEL = Workplace Exposure Limits

DNEL	Workers - Inhalation; Long term local effects: 35 mg/m³ Workers - Dermal; Long term systemic effects: 106 mg/kg/day General population - Inhalation; Long term local effects: 7 mg/m³ General population - Dermal; Long term systemic effects: 53 mg/kg/day
PNEC	Fresh water; 10 mg/l marine water; 1 mg/l STP; 199.5 mg/l Sediment (Freshwater); 37 mg/kg Sediment (Marinewater); 3.7 mg/kg Soil; 1.53 mg/kg
	2-Ethylhexanoic Acid (CAS: 149-57-5)
DNEL	Workers - Inhalation; Long term systemic effects: 14 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 2 mg/kg bw/day General population - Inhalation; Long term systemic effects: 3.5 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 1 mg/kg bw/day General population - Oral; Long term systemic effects: 1 mg/kg bw/day
PNEC	Fresh water; 0.4 mg/l Intermittent release; 1 mg/l marine water; 0.04 mg/l STP; 71.7 mg/l Sediment (Freshwater); 4.74 mg/kg sediment dw Sediment (Marinewater); 0.74 mg/kg sediment dw Soil; 0.712 mg/kg soil dw
	SODIUM HYDROXIDE (CAS: 1310-73-2)
DNEL	Workers - Inhalation; Long term local effects: 1 mg/m <sup>3</sup> General population - Dermal; Long term local effects: 1 mg/m <sup>3</sup>
	sodium 4(or 5)-methyl-1H-benzotriazolide (CAS: 64665-57-2)
DNEL	Workers - Inhalation; Long term systemic effects: 21.2 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 0.3 mg/kg/day General population - Inhalation; Long term systemic effects: 350 µg/m3 General population - Dermal; Long term systemic effects: 0.01 mg/kg/day General population - Oral; Long term systemic effects: 0.01 mg/kg/day
PNEC	Fresh water; 0.008 mg/l marine water; 20 µg/l STP; 39.4 mg/l Sediment (Freshwater); 0.117 mg/kg Sediment (Marinewater); 0.292 mg/kg Soil; 18.7 µg/kg
	PROPAN-1-OL (CAS: 71-23-8)
DNEL	Workers - Inhalation; Long term systemic effects: 268 mg/m <sup>3</sup> Workers - Inhalation; Short term systemic effects: 1723 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 136 mg/kg/day General population - Inhalation; Long term systemic effects: 80 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 81 mg/kg/day General population - Oral; Long term systemic effects: 61 mg/kg/day

# Prestone Anti Freeze Ready To Use (RTU)

	Fresh water; 6.83 mg/l marine water; 0.683 mg/l STP; 96 mg/l Sediment (Freshwater); 27.5 mg/kg Sediment (Marinewater); 2.75 mg/kg Soil; 1.49 mg/kg
	Polypropylene Glycol (CAS: 25322-69-4)
DNEL	Workers - Inhalation; Long term local effects: 10 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 84 mg/kg bw/day General population - Inhalation; Long term systemic effects: 10 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 51 mg/kg bw/day General population - Oral; Long term systemic effects: 24 mg/kg bw/day
PNEC	Fresh water; 0.1 mg/l marine water; 0.01 mg/l Intermittent release; 1 mg/l STP; 100 mg/l Sediment (Freshwater); 0.765 mg/kg sediment dw Sediment (Marinewater); 0.0765 mg/kg sediment dw Soil; 0.109 mg/kg soil dw
Ingredient comments	WEL = Workplace Exposure Limits
8.2. Exposure controls Protective equipment	
Appropriate engineering No specific controls	fic ventilation requirements.
Eye/face protection Wear che	emical splash goggles.
a risk ass	I-resistant, impervious gloves complying with an approved standard should be worn if sessment indicates skin contact is possible. To protect hands from chemicals, gloves omply with European Standard EN374.
	propriate clothing to prevent any possibility of liquid contact and repeated or d vapour contact.
	noke in work area. Do not eat, drink or smoke when using this product. Good hygiene procedures should be implemented. Wash hands thoroughly after handling.
	fic recommendations. Respiratory protection may be required if excessive airborne ation occurs.
SECTION 9: Physical and chemical prop	erties

#### 9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Yellow.
Odour	Mild. Characteristic.

рН	pH (concentrated solution): 8.5-9.0
Flash point	> 100°C Closed cup.
Relative density	~1.070 @ °C
Solubility(ies)	Soluble in water.
9.2. Other information	
Refractive index	1.3868
SECTION 10: Stability and rea	activity
10.1. Reactivity	
Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Organic compounds - aliphatic. Alcohols, glycols.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures.
10.3. Possibility of hazardous	reactions
10.4. Conditions to avoid	
Conditions to avoid	Avoid contact with the following materials: Acids. Oxidising agents.
10.5. Incompatible materials	
10.6. Hazardous decomposition	on products
Hazardous decomposition products	Oxides of carbon. Oxides of nitrogen.
SECTION 11: Toxicological information	
SECTION 11: Toxicological in	formation
SECTION 11: Toxicological in 11.1. Information on toxicologi	
11.1. Information on toxicologi	ical effects
11.1. Information on toxicologi Toxicological effects	ical effects
11.1. Information on toxicologi Toxicological effects Acute toxicity - oral	i <b>cal effects</b> No information available.
11.1. Information on toxicologi Toxicological effects <u>Acute toxicity - oral</u> Notes (oral LD₅₀)	i <mark>cal effects</mark> No information available. Harmful if swallowed.
11.1. Information on toxicologi Toxicological effects Acute toxicity - oral Notes (oral LD <sub>50</sub> ) ATE oral (mg/kg) Acute toxicity - dermal	ical effects No information available. Harmful if swallowed. 999.54
11.1. Information on toxicologiToxicological effectsAcute toxicity - oralNotes (oral LD50)ATE oral (mg/kg)Acute toxicity - dermalNotes (dermal LD50)Acute toxicity - inhalation	ical effects No information available. Harmful if swallowed. 999.54 Based on available data the classification criteria are not met.
11.1. Information on toxicologi         Toxicological effects         Acute toxicity - oral         Notes (oral LD <sub>50</sub> )         ATE oral (mg/kg)         Acute toxicity - dermal         Notes (dermal LD <sub>50</sub> )         Acute toxicity - inhalation         Notes (inhalation LC <sub>50</sub> )         Skin corrosion/irritation	ical effects No information available. Harmful if swallowed. 999.54 Based on available data the classification criteria are not met. Based on available data the classification criteria are not met.
11.1. Information on toxicologi         Toxicological effects         Acute toxicity - oral         Notes (oral LD <sub>50</sub> )         ATE oral (mg/kg)         Acute toxicity - dermal         Notes (dermal LD <sub>50</sub> )         Acute toxicity - inhalation         Notes (inhalation LC <sub>50</sub> )         Skin corrosion/irritation         Skin corrosion/irritation         Serious eye damage/irritation	Ical effects No information available. Harmful if swallowed. 999.54 Based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Based on available data the classification criteria are not met.
11.1. Information on toxicologi         Toxicological effects         Acute toxicity - oral         Notes (oral LD <sub>50</sub> )         ATE oral (mg/kg)         Acute toxicity - dermal         Notes (dermal LD <sub>50</sub> )         Acute toxicity - inhalation         Notes (inhalation LC <sub>50</sub> )         Skin corrosion/irritation         Skin corrosion/irritation         Serious eye damage/irritation         Serious eye damage/irritation         Respiratory sensitisation	Ical effects         No information available.         Harmful if swallowed.         999.54         Based on available data the classification criteria are not met.         Based on available data the classification criteria are not met.         Based on available data the classification criteria are not met.         Based on available data the classification criteria are not met.         Based on available data the classification criteria are not met.         Based on available data the classification criteria are not met.

Genotoxicity - in vitro	Based on available data the classification criteria are not met.	
Carcinogenicity		
Carcinogenicity	Based on available data the classification criteria are not met.	
Reproductive toxicity		
Reproductive toxicity - fertility	Conclusive data but not sufficient for classification.	
Reproductive toxicity - development	Contains an ingredient listed as: Repr. 2	
Specific target organ toxicity -	single exposure	
STOT - single exposure	No information available.	
Specific target organ toxicity - I	repeated exposure	
STOT - repeated exposure	Prolonged or repeated exposure may cause the following adverse effects: Liver and/or kidney damage.	
Aspiration hazard		
Aspiration hazard	Not relevant.	
Inhalation	This is unlikely to occur but symptoms similar to those of ingestion may develop.	
Ingestion	Harmful if swallowed. Swallowing concentrated chemical may cause severe internal injury.	
Skin contact	No adverse effects known. Prolonged skin contact may cause redness and irritation.	
Eye contact	May be slightly irritating to eyes. Prolonged contact may cause redness and/or tearing.	
Route of exposure	Inhalation Skin and/or eye contact	

Toxicological information on ingredients.

#### ETHANEDIOL

Acute toxicity - oral	
Notes (oral LD₅₀)	Harmful if swallowed.
ATE oral (mg/kg)	500.0
Acute toxicity - dermal	
Notes (dermal LD50)	LD₅₀ > 3500 mg/kg, Dermal, Mouse
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	LC50 > 2.5 mg/l, Inhalation, Rat
Skin corrosion/irritation	
Skin corrosion/irritation	Not irritating.
Serious eye damage/irritat	ion
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Not sensitising.

Germ cell mutagenicity		
Genotoxicity - in vitro	Negative.	
Genotoxicity - in vivo	Negative.	
Carcinogenicity		
Carcinogenicity	No evidence of carcinogenicity in animal studies. Based on available data the classification criteria are not met.	
Reproductive toxicity		
Reproductive toxicity - fertility	Three-generation study - NOAEL > 1000 mg/kg bw/day, Oral, Rat F2 Fertility - NOEL 1000 mg/kg bw/day, Oral, Mouse F1	
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.	
Specific target organ toxici	ty - single exposure	
STOT - single exposure	Based on available data the classification criteria are not met.	
Specific target organ toxici	ty - repeated exposure	
STOT - repeated exposure	Prolonged or repeated exposure may cause the following adverse effects: Liver and/or kidney damage.	
Aspiration hazard		
Aspiration hazard	Not relevant.	
Inhalation	No specific health hazards known.	
Ingestion	Harmful if swallowed.	
Skin contact	May be slightly irritating to skin.	
Eye contact	May be slightly irritating to eyes.	
2-Ethylhexanoic Acid		
Acute toxicity - oral		
Notes (oral LD₅₀)	LD₅o 2043 mg/kg, Oral, Rat	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	LD₅₀ > 2000 mg/kg, Dermal, Rat	
Acute toxicity - inhalation		
Notes (inhalation LC <sub>50</sub> )	LC0 0.11 mg/m³, Inhalation, Rat	
Skin corrosion/irritation		
Skin corrosion/irritation	Not irritating.	
Serious eye damage/irritati	ion	
Serious eye damage/irritation	Based on available data the classification criteria are not met.	
Respiratory sensitisation		
Respiratory sensitisation	No information available.	
Skin sensitisation		

Skin sensitisation	Not sensitising.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Negative.	
Genotoxicity - in vivo	Negative.	
Carcinogenicity		
Carcinogenicity	No information available.	
Reproductive toxicity		
Reproductive toxicity - fertility	Fertility - NOAEL 800 mg/kg bw/day, Oral, Rat F2 Suspected of damaging fertility.	
Specific target organ toxicit	y - single exposure	
STOT - single exposure	Based on available data the classification criteria are not met.	
Specific target organ toxicit	y - repeated exposure	
STOT - repeated exposure	Based on available data the classification criteria are not met.	
Aspiration hazard		
Aspiration hazard	Not relevant.	
	SODIUM HYDROXIDE	
Acute toxicity - oral		
Acute toxicity oral (LD₅₀ mg/kg)	500.0	
Species	Rat	
Notes (oral LD₅₀)	Not applicable. REACH dossier information.	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	Not applicable. REACH dossier information.	
Acute toxicity - inhalation		
Notes (inhalation LC₅₀)	Not applicable. REACH dossier information.	
Skin corrosion/irritation		
Skin corrosion/irritation	Causes severe burns.	
Serious eye damage/irritation		
Serious eye damage/irritation	Causes serious eye damage.	
Respiratory sensitisation		
Respiratory sensitisation	No information available.	
Skin sensitisation		
Skin sensitisation	Not sensitising.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Negative.	
Genotoxicity - in vivo	Negative.	

Carcinogenicity		
Carcinogenicity	Based on available data the classification criteria are not met.	
Reproductive toxicity		
Reproductive toxicity - fertility	Scientifically unjustified. REACH dossier information.	
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction.	
Specific target organ toxici	ty - single exposure	
STOT - single exposure	Based on available data the classification criteria are not met.	
Specific target organ toxici	ty - repeated exposure	
STOT - repeated exposure	Based on available data the classification criteria are not met.	
Aspiration hazard		
Aspiration hazard	Not relevant.	
	sodium 4(or 5)-methyl-1H-benzotriazolide	
Acute toxicity - oral		
Acute toxicity oral (LD₅₀ mg/kg)	800.0	
Species	Rat	
Notes (oral LD₅₀)	LD₅₀ 735 mg/kg, Oral, Rat Harmful if swallowed.	
ATE oral (mg/kg)	800.0	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	LD₅₀ > 2000 mg/kg, Dermal, Rabbit	
Acute toxicity - inhalation		
Notes (inhalation LC <sub>50</sub> )	No information available.	
Skin corrosion/irritation		
Skin corrosion/irritation	Causes severe burns.	
Serious eye damage/irritat	ion	
Serious eye damage/irritation	Causes serious eye damage.	
Respiratory sensitisation		
Respiratory sensitisation	Not sensitising. REACH dossier information.	
Skin sensitisation		
Skin sensitisation	Not sensitising.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Negative.	
Genotoxicity - in vivo	Negative.	
Carcinogenicity		
Carcinogenicity	No information available.	

Reproductive toxicity		
Reproductive toxicity - fertility	Based on available data the classification criteria are not met. REACH dossier information.	
Reproductive toxicity - development	Repr. 2	
Specific target organ toxicit	y - single exposure	
STOT - single exposure	Based on available data the classification criteria are not met.	
Specific target organ toxicit	y - repeated exposure	
STOT - repeated exposure	Based on available data the classification criteria are not met.	
Aspiration hazard		
Aspiration hazard	Not relevant.	
	PROPAN-1-OL	
Acute toxicity - oral		
Acute toxicity oral (LD₅₀ mg/kg)	5,400.0	
Species	Rat	
Acute toxicity - dermal		
Acute toxicity dermal (LD₅ mg/kg)	4,032.0	
Species	Rabbit	
Acute toxicity - inhalation		
Acute toxicity inhalation (LC <sub>50</sub> vapours mg/l)	33.8	
Species	Rat	
Serious eye damage/irritati	on	
Serious eye damage/irritation	Causes serious eye damage.	
	D11014A CHROMATINT URANINE CONC (Yellow)	
Inhalation	No specific health hazards known.	
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.	
Skin contact	Prolonged and frequent contact may cause redness and irritation.	
Eye contact	May cause eye irritation.	
Acute and chronic health hazards	This product has low toxicity. Only large quantities are likely to have adverse effects on human health.	
12: Ecological information		

### SECTION 12: Ecological information

#### Ecotoxicity

The product components are not classified as environmentally hazardous.

#### Ecological information on ingredients.

#### sodium 4(or 5)-methyl-1H-benzotriazolide

Ecotoxicity	Toxic to aquatic life with long lasting effects.
	D11014A CHROMATINT URANINE CONC (Yellow)

**Ecotoxicity** Not regarded as dangerous for the environment. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.	1.	Toxicity
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<u></u>	
Acute aquatic toxicity	
Acute toxicity - fish	No information available.
Acute toxicity - aquatic invertebrates	Not available.
Acute toxicity - aquatic plants	Not available.
Acute toxicity - microorganisms	Not available.
Acute toxicity - terrestrial	Not available.
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	Not available.
Short term toxicity - embryo and sac fry stages	Not available.
Chronic toxicity - aquatic	Not available.

#### Ecological information on ingredients.

invertebrates

#### **ETHANEDIOL**

Acute aquatic toxicity	
Acute toxicity - fish	LC₅₀, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: > 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC₅₀, 96 hours: 10940 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC <sub>20</sub> , 30 minutes: 1995 mg/l, Activated sludge Read-across data.
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	LC₅₀, 28 days: > 1500 mg/l, Menidia peninsulae (Tidewater silverside)
Chronic toxicity - aquatic invertebrates	EC₅₀, 21 days: > 100 mg/l, Daphnia magna

#### 2-Ethylhexanoic Acid

#### Acute aquatic toxicity

Acute toxicity - fish	LC₅₀, 96 hours: > 100 mg/l, Oryzias latipes (Red killifish)	
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 85.4 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	EC₅₀, 72 hours: 485.1 mg/l, Pseudokirchneriella subcapitata	
Chronic aquatic toxicity		
Chronic toxicity - aquatic invertebrates	EC10, LC10, NOEC, 21 days: 19.9 mg/l, Daphnia magna	
	SODIUM HYDROXIDE	
Acute aquatic toxicity		
Acute toxicity - fish	LC₅₀, 33-189 hours: 96 mg/l, Fish LC₅₀, 45.5 hours: 96 mg/l, Oncorhynchus mykiss (Rainbow trout)	
Acute toxicity - aquatic invertebrates	LC₅₀, 48 hours: 30 - < 1000 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	Scientifically unjustified.	
Acute toxicity - microorganisms	EC10, 2 minutes: 161 mg/l, Tetrahymena Thermophila EC₅₀, 15 minutes: 22 mg/l, Photobacterium phosphoreum luminescence inhibition study	
Chronic aquatic toxicity		
Chronic toxicity - fish early life stage	Not available.	
Short term toxicity - embryo and sac fry stages	Not available.	
Chronic toxicity - aquatic invertebrates	Not applicable.	
sodium 4(or 5)-methyl-1H-benzotriazolide		
Acute aquatic toxicity		
Acute toxicity - fish	LC₅₀, 96 hours: 180 mg/l, Brachydanio rerio (Zebra Fish) LC₅₀, 96 hours: 55 mg/l, Cyprinodon variegatus (Sheepshead minnow)	
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 8.58 mg/l, Daphnia galeata LC₅₀, 48 hours: 55 mg/l, Acartia tonsa	
Acute toxicity - aquatic plants	ErC50, 72 hours: 75 mg/l, Pseudokirchneriella subcapitata EC10, 72 hours: 1.18 - 2.86 mg/l, Desmodesmus subspicatus EC₅₀, 72 hours: 52 mg/l, Skeletonema costatum EC10, 72 hours: 36 mg/l, Skeletonema costatum EC90, 72 hours: 83 mg/l, Skeletonema costatum NOEC, 72 hours: 30 mg/l, Skeletonema costatum EC10, 7 days: 2.11 mg/l, Lemna minor	
Acute toxicity - microorganisms	EC₅₀, 3 hours: 1060 mg/l, Activated sludge EC10, NOEC, 3 hours: 394 mg/l, Activated sludge	
Chronic aquatic toxicity		

Chronic toxicity - aquatic	EC₅o, 21 days: > 37.6 mg/l, Daphnia magna
invertebrates	NOEC, 21 days: 18.4 mg/l, Daphnia magna
	EC10, 21 days: 0.4 - 0.97 mg/l, Daphnia galeata

#### **PROPAN-1-OL**

#### Acute aquatic toxicity

Acute toxicity - fish	$LC_{\mathfrak{so}},96$ hours: 4555 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 3644 mg/l, Daphnia magna NOEC, 21 days: > 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC₅₀, 72 hours: > 1000 mg/l, Algae

#### 12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

#### Ecological information on ingredients.

#### ETHANEDIOL

Persistence and degradability	10 days 90-100% Rapidly degradable	
	SODIUM HYDROXIDE	
Persistence and degradability	No data available.	
Stability (hydrolysis)	Scientifically unjustified.	
	REACH dossier information.	
	sodium 4(or 5)-methyl-1H-benzotriazolide	
Persistence and degradability	Not readily biodegradable.	
Phototransformation	Air - Half-life : 3.9 days	
Stability (hydrolysis)	pH4, pH7, pH9 - Degradation 0: 5 days @ 50 +/- 0.5°C	
Biodegradation	Soil - Half-life : 180 days	
	PROPAN-1-OL	
Persistence and degradability	The substance is readily biodegradable. 83%; 28 days	
12.3. Bioaccumulative potential		
Bioaccumulative potential No specific test data are available.		
Ecological information on ingredients.		
	ETHANEDIOI	

#### ETHANEDIOL

Partition coefficient

log Pow: -1.36 QSAR data.

#### SODIUM HYDROXIDE

	Bioaccumulative poten	tial No potential for bioaccumulation.		
	Partition coefficient	No information required. REACH dossier information.		
		sodium 4(or 5)-methyl-1H-benzotriazolide		
	Bioaccumulative poten	tial BCF: 2.422 L/kg, QSAR Bioaccumulation is unlikely. REACH dossier information.		
	Partition coefficient	log Pow: 1.087		
		PROPAN-1-OL		
	Partition coefficient	log Pow: 0.25		
12.4. Mobili	ty in soil			
Mobility	The	product is partly soluble in water and may spread in the aquatic environment.		
Ecological i	nformation on ingredient	<u>s.</u>		
		sodium 4(or 5)-methyl-1H-benzotriazolide		
	Adsorption/desorption coefficient	- Koc: 110 @ 20°C		
12.5. Resul	ts of PBT and vPvB asse	essment		
Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB.				
Ecological i	nformation on ingredient	S.		
		ETHANEDIOL		
	Results of PBT and vP assessment	<b>vB</b> This substance is not classified as PBT or vPvB according to current EU criteria.		
		2-Ethylhexanoic Acid		
	Results of PBT and vP assessment	<b>vB</b> This substance is not classified as PBT or vPvB according to current EU criteria.		
		SODIUM HYDROXIDE		
	Results of PBT and vP assessment	<b>vB</b> This substance is not classified as PBT or vPvB according to current EU criteria.		
		sodium 4(or 5)-methyl-1H-benzotriazolide		
	Results of PBT and vP assessment	<b>vB</b> This substance is not classified as PBT or vPvB according to current EU criteria.		
12.6. Other	adverse effects			
Other adve	rse effects Non	e known.		
SECTION 13: Disposal considerations				
13.1. Waste treatment methods				
•		oose of waste to licensed waste disposal site in accordance with the requirements of the I 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)

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
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) No 2015/830 of 28 May 2015.

#### 15.2. Chemical safety assessment

#### SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<ul> <li>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</li> <li>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</li> <li>ATE: Acute Toxicity Estimate.</li> <li>BOD: Biochemical Oxygen Demand.</li> <li>CAS: Chemical Abstracts Service.</li> <li>DNEL: Derived No Effect Level.</li> <li>EC<sub>50</sub>: 50% of maximal Effective Concentration.</li> <li>GHS: Globally Harmonized System.</li> <li>IARC: International Agency for Research on Cancer.</li> <li>IATA: International Air Transport Association.</li> </ul>
	<ul> <li>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</li> <li>IMDG: International Maritime Dangerous Goods.</li> <li>LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.</li> <li>LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).</li> <li>LOAEC: Lowest Observed Adverse Effect Concentration.</li> <li>LOAEL: Lowest Observed Adverse Effect Level.</li> <li>NOAEC: No Observed Adverse Effect Level.</li> <li>NOAEC: No Observed Adverse Effect Level.</li> <li>NOEC: No Observed Adverse Effect Level.</li> <li>NOEC: No Observed Effect Concentration.</li> <li>PBT: Persistent, Bioaccumulative and Toxic substance.</li> <li>PNEC: Predicted No Effect Concentration.</li> <li>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</li> <li>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</li> <li>SVHC: Substances of Very High Concern.</li> <li>UVCB - Unknown or variable composition, complex reaction products or Biological materials.</li> <li>vPvB: Very Persistent and Very Bioaccumulative.</li> </ul>
Revision date	29/01/2021
Revision	6
Supersedes date	25/10/2019
SDS number	14407
Hazard statements in full	<ul> <li>H225 Highly flammable liquid and vapour.</li> <li>H302 Harmful if swallowed.</li> <li>H314 Causes severe skin burns and eye damage.</li> <li>H315 Causes skin irritation.</li> <li>H318 Causes serious eye damage.</li> <li>H319 Causes serious eye irritation.</li> <li>H332 Harmful if inhaled.</li> <li>H335 May cause respiratory irritation.</li> <li>H361d Suspected of damaging the unborn child.</li> <li>H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>

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.