

# SAFETY DATA SHEET Aerosol Glass Cleaner

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product name	Aerosol Glass Cleaner	
Product number	SIM34, 72083254001, 72083254031, 72083255001, SIM34A, SAPP0701A, SAPP0030A, SAPP0102A	
Internal identification	A1103	
UFI	UFI: TQ13-40XW-J00R-1Y04	
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	of the substance or mixture and uses advised against	
Identified uses	Car maintenance product. Glass cleaner.	
1.3. Details of the supplier of	the safety data sheet	
Supplier	Holt Lloyd Services 52 Rue des 40 Mines, 60000 – Allonne, France	
	Phone: +33 (0)3 64 99 00 32	
	info@holtsauto.com	
Contact person	Contact Email address: info@holtsauto.com	
Manufacturer	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	
1.4. Emergency telephone number		

Emergency telephone

UK - 00 44 (0) 161 866 4800 Office hrs = 0900 - 1700 hrs

National emergency telephone	+43 1 31304 5620; chemikalien@umweltbundesamt.at (Austria)
number	+32022649636; info@poisoncentre.be (Belgium)
hambol	+359 2 9154 409; poison_centre@mail.orbitel.bg (Bulgaria)
	+38514686910; toksikologija@hziz.hr (Croatia)
	+35722405611; cy-chemregistry@dli.mlsi.gov.cy (Cyprus)
	+420267082257; biocidy@mzcr.cz (Czech Republic)
	+45 72 54 40 00; mst@mst.dk (Denmark)
	+372 794 3500; clp@terviseamet.ee, info@terviseamet.ee (Estonia)
	+358 5052 000; kirjaamo@tukes.fi (Finland)
	+ 33 3 83 85 21 92; bnpc@chru-nancy.fr (France)
	+49-30-18412-0; bfr@bfr.bund.de (Germany)
	+302106479250; +302106479450; devxp.gcsl@aade.gr, environment.gcsl@aade.gr (Greece)
	+36 (1) 476 1135; clp.ca@nnk.gov.hu (Hungary)
	+354 543 22 22; eitur@landspitali.is (Iceland)
	+353 (1) 809 2166 / +353 (1) 809 2566; chemicalsinfo@beaumont.ie (Ireland)
	+390649906140; inscweb@iss.it (Italy)
	+371 67032600; lvgmc@lvgmc.lv (Latvia)
	+370 70662008; aaa@aaa.am.lt (Lithuania)
	+320 22649636; +352 24785551; info@poisoncentre.be; direction-sante@ms.etat.lu
	(Luxembourg)
	+356 2395 2000; info@mccaa.org.mt (Malta)
	+31 88 75 585 61; productnotificatie@umcutrecht.nl (The Netherlands)
	+4573580500; produktregisteret@miljodir.no / +47 21 07 70 00; folkehelseinstituttet@fhi.no
	(Norway)
	+48 42 2538 400; biuro@chemikalia.gov.pl (Poland)
	+351213303271; ciav.tox@inem.pt (Portugal)
	+40213183606; infotox@insp.gov.ro (Romania)
	+7 495 621 6885; +7 495 628 1687; rtiac@mail.ru; rtiac2003@yahoo.com (Russia)
	+421 2 5465 2307; ntic@ntic.sk (Slovakia)
	+ 386 1 522 1293; gp.ukc@kclj.si (Slovenia)
	+34 917689800; intcf.doc@justicia.es (Spain)
	+46104566750; giftinformation@gic.se (Sweden)
	+44 121 507 4123; allistervale@npis.org, sallybradberry@npis.org (UK)

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### Classification (EC 1272/2008)

Physical hazards	Aerosol 1 - H222, H229
Health hazards	Not Classified
Environmental hazards	Not Classified
2.2. Label elements	
Hazard pictograms	



Signal word	Danger
Hazard statements	H222 Extremely flammable aerosol.
	H229 Pressurised container: may burst if heated.

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>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P211 Do not spray on an open flame or other ignition source.</li> <li>P251 Do not pierce or burn, even after use.</li> <li>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.</li> <li>P501 Dispose of contents/ container in accordance with national regulations.</li> </ul>
UFI	UFI: TQ13-40XW-J00R-1Y04
Detergent labelling	< 5% anionic surfactants

2.3. Other hazards

3.2. Mixtures

2-BUTOXYETHANOL			1-5%
CAS number: 111-76-2	EC number: 203-905-0	REACH registration number: 01- 2119475108-36-XXXX	
Classification			
Acute Tox. 4 - H302			
Acute Tox. 4 - H312			
Acute Tox. 4 - H332			
Skin Irrit. 2 - H315			
Eye Irrit. 2 - H319			
BUTANE			1-5%
CAS number: 106-97-8	EC number: 203-448-7	REACH registration number: 01-	
		2119474691-32-XXXX	
Classification			
Flam. Gas 1A - H220			
Press. Gas			
PROPANE			1-5%
CAS number: 74-98-6	EC number: 200-827-9	REACH registration number: 01-	
		2119486944-21-XXXX	
Classification			
Not Classified			
ISOBUTANE			1-5%
CAS number: 75-28-5	EC number: 200-857-2	REACH registration number: 01-	
		2119485395-27-XXXX	
Classification			
Flam. Gas 1A - H220			

Alkyl ether sulfate C12-14 w	vith EO, sodium salt		<1%
CAS number: 68891-38-3	EC number: 500-234-8		
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			
Sodium Nitrite			<1%
CAS number: 7632-00-0	EC number: 231-555-9	REACH registration number: 01- 2119471836-27-XXXX	
M factor (Acute) = 1			
<b>Classification</b> Ox. Sol. 3 - H272 Acute Tox. 3 - H301 Aquatic Acute 1 - H400			
AMMONIA%			<1%
CAS number: 1336-21-6	EC number: 215-647-6	REACH registration number: 01- 2119488876-14-XXXX	
M factor (Acute) = 1			
<b>Classification</b> Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335 Aquatic Acute 1 - H400			
ETHANEDIOL			<19
CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 01- 2119456816-28-XXXX	
<b>Classification</b> Acute Tox. 4 - H302 STOT RE 2 - H373			
The full text for all hazard sta	tements is displayed in Section 16.		
SECTION 4: First aid measu	res		
1.1. Description of first aid m	easures		
General information	Move affected person to fresh air at once. Get r	nedical attention if any discomfort continu	ies.
nhalation	Move affected person to fresh air at once. Get r	nedical attention if any discomfort continu	ies.
ngestion	Never give anything by mouth to an unconsciou mouth thoroughly with water. Give plenty of wat discomfort continues.		
Skin contact	Remove affected person from source of contam persists after washing.	ination. Get medical attention if irritation	

Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.	
4.2. Most important symptoms	and effects, both acute and delayed	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	Drowsiness, dizziness, disorientation, vertigo.	
Ingestion	May cause discomfort if swallowed.	
Skin contact	May be slightly irritating to skin. Prolonged or repeated exposure may cause severe irritation.	
Eye contact	May be slightly irritating to eyes. Prolonged or repeated exposure may cause severe irritation.	
4.3. Indication of any immedia	te medical attention and special treatment needed	
Notes for the doctor	Treat symptomatically.	
SECTION 5: Firefighting meas	sures	
5.1. Extinguishing media		
Suitable extinguishing media	Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc.	
5.2. Special hazards arising fr	om the substance or mixture	
Specific hazards	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. May explode when heated or when exposed to flames or sparks. Containers can burst violently or explode when heated, due to excessive pressure build-up.	
Hazardous combustion products	Oxides of carbon.	
5.3. Advice for firefighters		
Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses.	
Special protective equipment for firefighters	Wear chemical protective suit.	
SECTION 6: Accidental release	se measures	
6.1. Personal precautions, pro	tective equipment and emergency procedures	
Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.	
6.2. Environmental precaution	<u>s</u>	
Environmental precautions	Not considered to be a significant hazard due to the small quantities used.	
6.3. Methods and material for	containment and cleaning up	
Methods for cleaning up	Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.	
6.4. Reference to other section	ns	
Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.	
SECTION 7: Handling and storage		
7.1. Precautions for safe hand	lling	

Usage precautions	Avoid spilling. Avoid inhalation of vapours and contact with skin and eyes.
7.2. Conditions for safe sto	prage, including any incompatibilities
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.
Storage class	Flammable compressed gas 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

#### 2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m<sup>3</sup> Sk

#### BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m<sup>3</sup>

#### ISOBUTANE

Long-term exposure limit (8-hour TWA): OES 800 ppm Short-term exposure limit (15-minute): OES 800 ppm

#### **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/m<sup>3</sup> particulate Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

#### 2-BUTOXYETHANOL (CAS: 111-76-2)

DNEL	Industry - Dermal; Short term : 89 mg/kg/day Industry - Inhalation; Short term : 663 mg/m <sup>3</sup> Industry - Dermal; Long term : 75 mg/kg/day Industry - Inhalation; Long term : 98 mg/m <sup>3</sup> Consumer - Dermal; Short term : 44.5 mg/kg/day Consumer - Inhalation; Short term : 426 mg/m <sup>3</sup> Consumer - Oral; Short term : 13.4 mg/kg/day Consumer - Dermal; Long term : 38 mg/kg/day Consumer - Oral; Long term : 3.2 mg/kg/day
PNEC	Fresh water; 8.8 mg/l marine water; 8.8 mg/l Sediment; 8.14 mg/kg Soil; 2.8 mg/kg

Sodium Nitrite (CAS: 7632-00-0)

DNEL	Workers - Inhalation; Long term systemic effects: 2 mg/m <sup>3</sup> Workers - Inhalation; Short term systemic effects: 2 mg/m <sup>3</sup>
PNEC	Fresh water; 0.0054 mg/l marine water; 0.00616 mg/l Intermittent release; 0.0054 mg/l STP; 21 mg/l Sediment (Freshwater); 0.0195 mg/kg sediment dw Sediment (Marinewater); 0.0223 mg/kg sediment dw Soil; 0.00073 mg/kg soil dw
	ETHANEDIOL (CAS: 107-21-1)
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
8.2. Exposure controls	
Protective equipment	



Appropriate engineering controls	Provide adequate general and local exhaust ventilation.
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: Chemical splash goggles or face shield.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Rubber (natural, latex). 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	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. Do not eat, drink or smoke when using this product.

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

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

Appearance	Liquid.
Colour	Colourless.

Odour	Characteristic	
рН 	pH (concentrated solution): 9.0	
Flash point	<1°C Closed cup.	
Relative density	0.987 @ °C	
Solubility(ies)	Miscible with water. Alcohols.	
9.2. Other information		
SECTION 10: Stability and rea	ictivity	
10.1. Reactivity		
Reactivity	There are no known reactivity hazards associated with this product.	
10.2. Chemical stability		
Stability	Stable at normal ambient temperatures.	
10.3. Possibility of hazardous	reactions	
Possibility of hazardous reactions	Not relevant. May polymerise. Avoid heat.	
10.4. Conditions to avoid		
Conditions to avoid	Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Strong oxidising agents.	
10.5. Incompatible materials		
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.	
10.6. Hazardous decomposition products		
Hazardous decomposition		
products		
SECTION 11: Toxicological int	formation	
11.1. Information on toxicologi	cal effects	
Toxicological effects	No information available.	
Acute toxicity - oral		
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.	
ATE oral (mg/kg)	9,642.16	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.	
ATE dermal (mg/kg)	26,500.37	
Acute toxicity - inhalation Notes (inhalation LC <sub>50</sub> )	Based on available data the classification criteria are not met.	
ATE inhalation (gases ppm)	108,410.59	
ATE inhalation (vapours mg/l)	265.0	
ATE inhalation (dusts/mists mg/l)	36.14	

Skin corrosion/irritation	
Skin corrosion/irritation	Based on available data the classification criteria are not met.
Serious eye damage/irritation	
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	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	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	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Does not contain any substances known to be toxic to reproduction.
Specific target organ toxicity - s	single exposure
STOT - single exposure	Based on available data the classification criteria are not met.
Specific target organ toxicity - r	repeated exposure
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	Not relevant.
Inhalation	Drowsiness, dizziness, disorientation, vertigo.
Ingestion	May cause discomfort if swallowed.
Skin contact	May be slightly irritating to skin. Prolonged or repeated exposure may cause severe irritation.
Eye contact	May be slightly irritating to eyes. Prolonged or repeated exposure may cause severe irritation.
Route of exposure	Inhalation Skin and/or eye contact
Toxicological information on ing	gredients.

2-BUTOXYETHANOL

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	470.0
Species	Rat
Notes (oral LD₅₀)	Harmful if swallowed. LD₅₀ 1414 mg/kg, Oral, Guinea pig
ATE oral (mg/kg)	470.0
Acute toxicity - dermal	

Notes (dermal LD₅₀)	Harmful in contact with skin. LC0, NOAEC > 2000 mg/kg, Dermal, Guinea pig	
ATE dermal (mg/kg)	1,100.0	
Acute toxicity - inhalation		
Notes (inhalation LC <sub>50</sub> )	Harmful if inhaled. LC0 > 3.1 (females); > 3.4 (males) mg/l, Inhalation, Guinea pig	
Skin corrosion/irritation		
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/irritat	ion	
Serious eye damage/irritation	Causes serious eye irritation.	
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 evidence of carcinogenicity in animal studies. NOAEC 125 mg/m³, Inhalation, Mouse, Rat	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.	
Reproductive toxicity		
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met. Two-generation study - NOAEL 720 mg/kg/day, Oral, Mouse F0, F1	
Reproductive toxicity -		
Reproductive toxicity - fertility Reproductive toxicity -	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 200 (developmental) ppm, Inhalation, Rat</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 200 (developmental) ppm, Inhalation, Rat</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: &lt; 150 (maternal); &gt; 200 (developmental) ppm, Inhalation, Rat</li> <li><b>ity - single exposure</b></li> <li>Based on available data the classification criteria are not met.</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development Specific target organ toxic STOT - single exposure Specific target organ toxic	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: &lt; 150 (maternal); &gt; 200 (developmental) ppm, Inhalation, Rat</li> <li><b>ity - single exposure</b></li> <li>Based on available data the classification criteria are not met.</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development Specific target organ toxic STOT - single exposure Specific target organ toxic	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 200 (developmental) ppm, Inhalation, Rat</li> <li><b>ity - single exposure</b></li> <li>Based on available data the classification criteria are not met.</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development Specific target organ toxic STOT - single exposure Specific target organ toxic STOT - repeated exposure	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 200 (developmental) ppm, Inhalation, Rat</li> <li><b>ity - single exposure</b></li> <li>Based on available data the classification criteria are not met.</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development Specific target organ toxic STOT - single exposure Specific target organ toxic STOT - repeated exposure Aspiration hazard	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 200 (developmental) ppm, Inhalation, Rat</li> <li>ity - single exposure</li> <li>Based on available data the classification criteria are not met.</li> <li>ity - repeated exposure</li> <li>Based on available data the classification criteria are not met.</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development Specific target organ toxic STOT - single exposure Specific target organ toxic STOT - repeated exposure Aspiration hazard	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: &lt; 1180 (maternal); &lt; 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 200 (developmental) ppm, Inhalation, Rat</li> <li>ity - single exposure</li> <li>Based on available data the classification criteria are not met.</li> <li>ity - repeated exposure</li> <li>Based on available data the classification criteria are not met.</li> </ul>	
Reproductive toxicity - fertility Reproductive toxicity - development Specific target organ toxic STOT - single exposure Specific target organ toxic STOT - repeated exposure Aspiration hazard Aspiration hazard	<ul> <li>NOAEL 720 mg/kg/day, Oral, Mouse F0, F1</li> <li>This substance has no evidence of toxicity to reproduction NOAEL: 30 (maternal); 100 (developmental) mg/kg/day, Oral, Rat - NOAEL: 350 (maternal); 650 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 1180 (developmental) mg/kg/day, Oral, Mouse - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 100 (developmental) ppm, Inhalation, Rat - NOAEL: 50 (maternal); 200 (developmental) ppm, Inhalation, Rat</li> <li><b>ity - single exposure</b></li> <li>Based on available data the classification criteria are not met.</li> <li><b>ity - repeated exposure</b></li> <li>Assed on available data the classification criteria are not met.</li> </ul>	

Skin contact	Harmful in contact with skin. Causes skin irritation.
Eye contact	Causes serious eye irritation.
	BUTANE
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
	PROPANE
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0
	ISOBUTANE
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0
	Sodium Nitrite
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	180.0
Species	Rat
ATE oral (mg/kg)	180.0
Acute toxicity - dermal	
Notes (dermal LD₅₀)	No specific test data are available.
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	No specific test data are available.
Skin corrosion/irritation	
Skin corrosion/irritation	Not irritating.
Serious eye damage/irritati	
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	

Skin sensitisation	Not sensitising.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Inconclusive data.	
Genotoxicity - in vivo	Inconclusive data.	
Carcinogenicity		
Carcinogenicity	There is no evidence that the product can cause cancer.	
IARC carcinogenicity	IARC Group 2A Probably carcinogenic to humans.	
Reproductive toxicity		
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.	
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.	
Specific target organ toxicit	y - single exposure	
STOT - single exposure	A single exposure may cause the following adverse effects: Methaemoglobinanaemia	
Target organs	Blood	
Specific target organ toxicit	y - repeated exposure	
STOT - repeated exposure	Prolonged or repeated exposure may cause the following adverse effects: Methaemoglobinanaemia	
Target organs	Blood	
Aspiration hazard		
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.	
Inhalation	Nausea, vomiting. Unconsciousness and convulsions can occur.	
Ingestion	Toxic if swallowed. Symptoms following overexposure may include the following: Nausea, vomiting. Unconsciousness and convulsions can occur.	
Skin contact	Skin irritation should not occur when used as recommended.	
Eye contact	Causes serious eye irritation.	
	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 LC <sub>50</sub> )	LC50 > 2.5 mg/l, Inhalation, Rat	
Skin corrosion/irritation		

Skin corrosion/irritation	Not irritating.	
Serious eye damage/irritatio	on	
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 toxicity	y - single exposure	
STOT - single exposure	Based on available data the classification criteria are not met.	
Specific target organ toxicity	y - 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: Ecological information		

Ecotoxicity

SECTION

The product is not expected to be hazardous to the environment.

Ecological information on ingredients.

### Sodium Nitrite

Ecotoxicity

Very toxic to aquatic life.

12.1. Toxicity 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 invertebrates	Not available.

### Ecological information on ingredients.

### 2-BUTOXYETHANOL

Acute aquatic toxicity	
Acute toxicity - fish	LC₅₀, 96 hours: 1474 mg/l, Freshwater fish, Oncorhynchus mykiss (Rainbow trout) LC₅₀, 96 hours: 1250 mg/l, Marinewater fish, Menidia beryllina
Acute toxicity - aquatic invertebrates	EC₅₀, LC₅₀, 72 hours: 690 mg/l, Freshwater invertebrates
Acute toxicity - aquatic plants	EC₅₀, 72 hours: 623 mg/l, Freshwater algae EC10, NOEC, 72 hours: 88 mg/l, Freshwater algae
Acute toxicity - microorganisms	EC10, NOEC, 48 hours: 463 mg/l, Uronema parduczi.
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	EC10, LC10, NOEC, 21 days: 100 mg/l, Brachydanio rerio (Zebra Fish)
Chronic toxicity - aquatic invertebrates	EC10, LC10, NOEC, 21 days: 100 mg/l, Freshwater invertebrates
	Sodium Nitrite
Acute aquatic toxicity	
LE(C) <sub>50</sub>	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC₅₀, 96 hours: 0.54-26.3 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 31 days: 6.16 mg/l, Ictalurus punctatus / I. robustus
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 15.4 mg/l, Daphnia magna EC₅₀, 96 hours: 4.93 mg/l, Marinewater invertebrates, Freshwater invertebrates
Acute toxicity - aquatic plants	EC₅₀, 72 hours: > 100 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms	EC₅, 48 hours: 421 mg/l, protozoa EC10, 72 hours: 210 mg/l, Activated sludge
Chronic aquatic toxicity	
Chronic toxicity - aquatic invertebrates	NOEC, 80 days: 9.86 mg/l, Daphnia magna
	AMMONIA%
Acute aquatic toxicity	
LE(C)50	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
	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
12.2. Persistence and degradability	
Persistence and degradability Expecte	d to be readily biodegradable.
Ecological information on ingredients.	
	2-BUTOXYETHANOL
Persistence and degradability	Rapidly degradable
	Sodium Nitrite
Biodegradation	Not readily biodegradable.
	ETHANEDIOL
Persistence and degradability	10 days 90-100% Rapidly degradable
12.3. Bioaccumulative potential	
Bioaccumulative potential The prod	duct does not contain any substances expected to be bioaccumulating.
Ecological information on ingredients.	

#### Sodium Nitrite

Bioaccumulative potential	The product is not bioaccumulating.
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Partition coefficient Scientifically unjustified.

#### **ETHANEDIOL**

### Partition coefficient

log Pow: -1.36 QSAR data.

### 12.4. Mobility in soil

Mobility

The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

#### 12.5. Results of PBT and vPvB assessment

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

assessment

#### Ecological information on ingredients.

#### 2-BUTOXYETHANOL

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

#### **ETHANEDIOL**

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

#### 12.6. Other adverse effects

Other adverse effects None known.

#### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**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**

14.1. UN number		
UN No. (ADR/RID)	1950	
UN No. (IMDG)	1950	
UN No. (ICAO)	1950	
UN No. (ADN)	1950	
14.2. UN proper shipping name		
Proper shipping name (ADR/RID)	AEROSOLS	
Proper shipping name (IMDG)	AEROSOLS	
Proper shipping name (ICAO)	AEROSOLS	
Proper shipping name (ADN)	AEROSOLS	

### 14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1

### Transport labels



14.4. Packing group	
ADR/RID packing group	None
IMDG packing group	None
ICAO packing group	None
ADN packing group	None

#### 14.5. Environmental hazards

# Environmentally hazardous substance/marine pollutant No.

14.6.	Special	precautions for us	ser
EmS			F-D, S-U

ADR transport	category	2

Tunnel restriction code (D)

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended). Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended).
	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.

Authorisations (Annex XIV Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Annex XVII Regulation 1907/2006)	No specific restrictions on use are known for this product.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

Abbrevietiene and commune	ADN. European American transmiss the later stimul Amiran (Demonstrated American
Abbreviations and acronyms used in the safety data sheet	ADN: European Agreement concerning the International Carriage of Dangerous Goods by
	Inland Waterways. ADR: European Agreement concerning the International Carriage of Dangerous Goods by
	Road.
	ATE: Acute Toxicity Estimate.
	BOD: Biochemical Oxygen Demand.
	CAS: Chemical Abstracts Service.
	DNEL: Derived No Effect Level.
	EC <sub>50</sub> : 50% of maximal Effective Concentration.
	GHS: Globally Harmonized System.
	IARC: International Agency for Research on Cancer.
	IATA: International Air Transport Association.
	ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
	IMDG: International Maritime Dangerous Goods.
	LC₅₀: Lethal Concentration to 50 % of a test population.
	LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
	LOAEC: Lowest Observed Adverse Effect Concentration.
	LOAEL: Lowest Observed Adverse Effect Level.
	LOEC: Lowest Observed Effect Concentration.
	NOAEC: No Observed Adverse Effect Concentration.
	NOAEL: No Observed Adverse Effect Level.
	NOEC: No Observed Effect Concentration.
	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.
	SVHC: Substances of Very High Concern.
	UVCB - Unknown or variable composition, complex reaction products or Biological materials.
	vPvB: Very Persistent and Very Bioaccumulative.
Revision date	13/05/2021
Revision	19
Supersedes date	25/11/2015
SDS number	13521

Hazard statements in full	H220 Extremely flammable gas.
	H222 Extremely flammable aerosol.
	H229 Pressurised container: may burst if heated.
	H272 May intensify fire; oxidiser.
	H301 Toxic if swallowed.
	H302 Harmful if swallowed.
	H312 Harmful in contact with skin.
	H314 Causes severe skin burns and eye damage.
	H315 Causes skin irritation.
	H318 Causes serious eye damage.
	H319 Causes serious eye irritation.
	H332 Harmful if inhaled.
	H335 May cause respiratory irritation.
	H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.
	H400 Very toxic to aquatic life.

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.