SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

Supercedes date 16-Dec-2022 **Revision date** 04-Feb-2025 **Revision Number** 2

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

1.1. Product identifier

Product Name Restorative

Synonyms None

Pure substance/mixture Mixture

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

Recommended use Embalming chemical

Uses advised against Use only for intended applications

1.3. Details of the supplier of the safety data sheet

Manufacturer
The MazWell Group Ltd.
Units 11/14-15 Ardglen
Industrial Estate,
Whitchurch, Hampshire,
RG28 7BB, United Kingdom
+44 (0)1256-893883
+44 (0)1256-893868
enquiries@themazwellgroup.com

Supplier
Medenta GmbH
Huckrieden Esch 9,
49549 Ladbergen.
Germany
(05485) 2020
info@medenta.de

For further information, please contact
E-mail address enquiries@themazwellgroup.com

1.4. Emergency telephone number

Emergency telephone No information available

Emergency telephone - §45 - (EC)1272/2008	
Europe	**112**
France	Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59
Germany	Poison Control Center - Charité - Universitätsmedizin Berlin Tel (+49) 30 30686700
Hungary	+36 (06) 80 201-199
Italy	06 68593726 (Roma - CAV "Osp. Pediatric Bambino Gesù" Dip. Emergency and DEA

	Acceptance) 800183459 (Foggia - Centro antiveleni , Az. Osp. Univ. Foggia) 081-5453333 (Napoli - Centro antiveleni, Az. Osp. "A. Cardarelli") 06-49978000 (Roma - CAV Policlinico "Umberto I") 06-3054343 (Roma - CAV Policlinico "A. Gemelli") 055-7947819 (Firenze - Centro antiveleni , Az. Osp. "Careggi" U.O. Tossicologia Medica) 0382-24444 (Pavia - Centro antiveleni, Centro Nazionale di Informazione Tossicologica) 02-66101029 (Milano - Centro antiveleni, Osp. Niguarda Ca' Granda) 800883300 (Bergamo - Centro antiveleni, Azienda Ospedaliera Papa Giovanni XXII) 800011858 (Verona - Centro antiveleni, Azienda Ospedaliera Integrata Verona)
Netherlands	+31(0)302748888
Romania	+40 (0)21 318 36 06
Spain	+34 91 562 04 20

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye irritation	Category 2 - (H319)

2.2. Label elements

Signal word
Warning

Hazard statements
H319 - Causes serious eye irritation.

Precautionary Statements - EU (§28, 1272/2008)
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P280 - Wear eye and face protection.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice/attention.

Additional information
This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Other hazards Causes mild skin irritation.

PBT & vPvB None known

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Propylene Glycol 57-55-6	5 - < 10	-	200-338-0	[F]	-	-	-	-
Hexylene glycol 107-41-5	1 - < 5	No data available	203-489-0 (603-053-00-3)	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-	-	-	-
Polyethylene glycol 25322-68-3	1 - < 5	No data available	500-038-2	[C]	-	-	-	-
Isopropyl alcohol 67-63-0	1 - < 5	No data available	200-661-7	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336)	-	-	-	-
Triethanolamine 102-71-6	< 1	No data available	203-049-8	[C]	-	-	-	-
Sodium hydroxide 1310-73-2	<0.025	No data available	215-185-5 (011-002-00-6)	Skin Corr. 1A (H314)	Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2%	-	-	-

Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes
[C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring
[F] - Although non-hazardous, the manufacturer chooses to disclose the composition

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Propylene Glycol 57-55-6	20000	20800	No data available	No data available	No data available
Hexylene glycol 107-41-5	3700	12300	0.0776	No data available	No data available
Polyethylene glycol 25322-68-3	22000	20020	No data available	No data available	No data available
Isopropyl alcohol 67-63-0	4710	4059	No data available	30.1002	No data available
Triethanolamine 102-71-6	4190	20020	No data available	No data available	No data available
Sodium hydroxide 1310-73-2	325	1350	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.

Effects of Exposure No information available.

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

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information See section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Storage class (TRGS 510) LGK 10.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Propylene Glycol 57-55-6	-	-	-	-	TWA-GVI: 150 ppm; TWA-GVI: 474 mg/m³; total vapor and particles TWA-GVI: 10 mg/m³; particles
Hexylene glycol 107-41-5	-	TWA-TMW: 10 ppm; TWA-TMW: 49 mg/m³; STEL-KZGW: 10 ppm (); STEL-KZGW: 49 mg/m³ (); Ceiling: 10 ppm;	STEL: 25 ppm; STEL: 123 mg/m³;	-	TWA-GVI: 25 ppm; TWA-GVI: 123 mg/m³; STEL-KGVI: 25 ppm; STEL-KGVI: 123 mg/m³; Sk

		Ceiling: 49 mg/m³;			
Polyethylene glycol 25322-68-3	-	TWA-TMW: 1000 mg/m³; inhalable fraction STEL-KZGW: 4000 mg/m³ (4 X 15 min); inhalable fraction	-	-	-
Isopropyl alcohol 67-63-0	-	TWA-TMW: 200 ppm; TWA-TMW: 500 mg/m³; STEL-KZGW: 800 ppm (4 X 15 min); STEL-KZGW: 2000 mg/m³ (4 X 15 min);	TWA: 200 ppm; TWA: 500 mg/m³; STEL: 400 ppm; STEL: 1000 mg/m³;	TWA: 980.0 mg/m³; STEL: 1225.0 mg/m³;	TWA-GVI: 400 ppm; TWA-GVI: 999 mg/m³; STEL-KGVI: 500 ppm; STEL-KGVI: 1250 mg/m³;
Triethanolamine 102-71-6	-	TWA-TMW: 0.8 ppm; TWA-TMW: 5 mg/m³; inhalable fraction STEL-KZGW: 1.6 ppm (4 X 15 min); STEL-KZGW: 10 mg/m³ (4 X 15 min); inhalable fraction S	TWA: 5 mg/m³;	-	-
Sodium hydroxide 1310-73-2	-	TWA-TMW: 2 mg/m³; inhalable fraction STEL-KZGW: 4 mg/m³ (8 X 5 min); inhalable fraction	TWA: 2 mg/m³;	TWA: 2.0 mg/m³; alkaline aerosols	STEL-KGVI: 2 mg/m³;

Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Hexylene glycol 107-41-5	-	-	Ceiling: 25 ppm; Ceiling: 125 mg/m³;	-	TWA: 25 ppm; TWA: 120 mg/m³; STEL: 40 ppm; STEL: 200 mg/m³;
Polyethylene glycol 25322-68-3	-	-	TWA: 1000 mg/m³; STEL: 2000 mg/m³;	-	-
Isopropyl alcohol 67-63-0	-	TWA: 500 mg/m³; Ceiling: 1000 mg/m³; pSk	TWA: 200 ppm; TWA: 490 mg/m³; STEL: 400 ppm; STEL: 980 mg/m³;	TWA: 150 ppm; TWA: 350 mg/m³; STEL: 250 ppm; STEL: 600 mg/m³;	TWA: 200 ppm; TWA: 500 mg/m³; STEL: 250 ppm; STEL: 620 mg/m³;
Triethanolamine 102-71-6	-	TWA: 5 mg/m³; Ceiling: 10 mg/m³; pSk	TWA: 0.5 ppm; TWA: 3.1 mg/m³; STEL: 1 ppm; STEL: 6.2 mg/m³;	TWA: 5 mg/m³; STEL: 10 mg/m³; S	TWA: 5 mg/m³;
Sodium hydroxide 1310-73-2	-	TWA: 1 mg/m³; Ceiling: 2 mg/m³;	Ceiling: 2 mg/m³;	TWA: 1 mg/m³; STEL: 2 mg/m³;	Ceiling: 2 mg/m³;

Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Hexylene glycol 107-41-5	STEL-VLCT: 25 ppm; STEL-VLCT: 125 mg/m³;	-	TWA-MAK: 10 ppm; I(2); TWA-MAK: 49 mg/m³; I(2); Peak: 20 ppm; Peak: 98 mg/m³;	TWA: 25 ppm; TWA: 125 mg/m³; STEL: 25 ppm; STEL: 125 mg/m³;	-
Polyethylene glycol 25322-68-3	-	TWA-AGW; 200 mg/m³ (exposure factor 2); inhalable	TWA-MAK: 250 mg/m³; II(2);inhalable fraction	-	-

		fraction	Peak: 500 mg/m³; inhalable fraction		
Isopropyl alcohol 67-63-0	STEL-VLCT: 400 ppm; STEL-VLCT: 980 mg/m³;	TWA-AGW; 200 ppm (exposure factor 2); TWA-AGW; 500 mg/m³ (exposure factor 2);	TWA-MAK: 200 ppm; II(2); TWA-MAK: 500 mg/m³; II(2); Peak: 400 ppm; Peak: 1000 mg/m³;	TWA: 400 ppm; TWA: 980 mg/m³; STEL: 500 ppm; STEL: 1225 mg/m³;	TWA-AK: 500 mg/m³; TWA-AK: 200 ppm; STEL-CK: 1000 mg/m³; STEL-CK: 400 ppm; pSk
Triethanolamine 102-71-6	-	TWA-AGW; 1 mg/m³ (exposure factor 1); inhalable fraction	TWA-MAK: 1 mg/m³; I(1);inhalable fraction Peak: 1 mg/m³; inhalable fraction	-	-
Sodium hydroxide 1310-73-2	TWA-VME: 2 mg/m³;	-	-	TWA: 2 mg/m³; STEL: 2 mg/m³;	TWA-AK: 1 mg/m³; STEL-CK: 2 mg/m³;
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Propylene Glycol 57-55-6	TWA: 10 mg/m³; particulate TWA: 150 ppm; total vapour and particulates TWA: 470 mg/m³; total vapour and particulates STEL: 1410 mg/m³ (calculated); particulates STEL: 30 mg/m³ (calculated); STEL: 450 ppm (calculated); total vapor and particulates	-	-	TWA: 7 mg/m³;	TWA-IPRD: 7 mg/m³;
Hexylene glycol 107-41-5	STEL: 25 ppm; STEL: 125 mg/m³;	-	STEL (REL): 50 ppm; vapor fraction STEL (REL): 10 mg/m³; inhalable fraction and aerosol	-	Ceiling (NRD): 25 ppm; Ceiling (NRD): 120 mg/m³;
Isopropyl alcohol 67-63-0	TWA: 200 ppm; STEL: 400 ppm; pSk	-	TWA: 200 ppm; TWA: 492 mg/m³; STEL (REL): 400 ppm; STEL (REL): 983 mg/m³;	TWA: 350 mg/m³; STEL: 600 mg/m³;	TWA-IPRD: 150 ppm; TWA-IPRD: 350 mg/m³; STEL-TPRD: 250 ppm; STEL-TPRD: 600 mg/m³;
Triethanolamine 102-71-6	TWA: 5 mg/m³; STEL: 15 mg/m³ (calculated);	-	TWA: 5 mg/m³;	-	TWA-IPRD: 5 mg/m³; STEL-TPRD: 10 mg/m³; S
Sodium hydroxide 1310-73-2	STEL: 2 mg/m³;	-	Ceiling: 2 mg/m³;	TWA: 0.5 mg/m³;	Ceiling (NRD): 2 mg/m³;
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Propylene Glycol 57-55-6	-	-	-	TWA: 25 ppm; TWA: 79 mg/m³; STEL: 37.5 ppm (value	TWA-NDS: 100 mg/m³; vapor and inhalable fraction

				calculated); STEL: 118.5 mg/m³ (value calculated);	
Hexylene glycol 107-41-5	-	-	-	Ceiling: 20 ppm; Ceiling: 100 mg/m³;	TWA-NDS: 50 mg/m³; vapor and inhalable fraction STEL-NDSCh: 100 mg/m³; vapor and inhalable fraction
Isopropyl alcohol 67-63-0	-	-	-	TWA: 100 ppm; TWA: 245 mg/m³; STEL: 150 ppm (value calculated); STEL: 306.25 mg/m³ (value calculated);	TWA-NDS: 900 mg/m³; STEL-NDSCh: 1200 mg/m³; Sk
Triethanolamine 102-71-6	-	-	-	TWA: 5 mg/m³; STEL: 10 mg/m³ (value calculated);	-
Sodium hydroxide 1310-73-2	-	-	-	Ceiling: 2 mg/m³;	TWA-NDS: 0.5 mg/m³; STEL-NDSCh: 1 mg/m³;

Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Hexylene glycol 107-41-5	Ceiling (VLE-CM): 25 ppm;	-	-	-	STEL (VLA-EC): 25 ppm; STEL (VLA-EC): 123 mg/m³;
Polyethylene glycol 25322-68-3	-	-	TWA: 1000 mg/m³;	TWA: 1000 mg/m³; inhalable fraction STEL: 8000 mg/m³; inhalable fraction	-
Isopropyl alcohol 67-63-0	TWA (VLE-MP): 200 ppm; STEL (VLE-CD): 400 ppm;	TWA: 81 ppm; TWA: 200 mg/m³; STEL: 203 ppm; STEL: 500 mg/m³;	TWA: 200 ppm; TWA: 500 mg/m³; Ceiling: 1000 mg/m³;	TWA: 200 ppm; TWA: 500 mg/m³; STEL: 400 ppm; STEL: 1000 mg/m³;	TWA-(VLA-ED): 200 ppm; TWA-(VLA-ED): 500 mg/m³; STEL (VLA-EC): 400 ppm; STEL (VLA-EC): 1000 mg/m³;
Triethanolamine 102-71-6	TWA (VLE-MP): 5 mg/m³;	-	-	-	TWA-(VLA-ED): 5 mg/m³;
Sodium hydroxide 1310-73-2	Ceiling (VLE-CM): 2 mg/m³;	TWA: 1 mg/m³; STEL: 3 mg/m³;	TWA: 2 mg/m³;	-	STEL (VLA-EC): 2 mg/m³;

Chemical name	Sweden	Switzerland	United Kingdom
Propylene Glycol 57-55-6	-	-	TWA: 150 ppm; total vapour and particulate TWA: 474 mg/m³; total vapour and particulate TWA: 10 mg/m³; particulate STEL: 450 ppm; total vapour and particulate STEL: 1422 mg/m³; total vapour and particulate STEL: 30 mg/m³; particulate
Hexylene glycol	STEL (Bindande KGV): 25 ppm;	TWA-MAK: 10 ppm; aerosol,	TWA: 25 ppm;

107-41-5	STEL (Bindande KGV): 120 mg/m³;	vapour TWA-MAK: 49 mg/m³; aerosol, vapour STEL-KZGW: 20 ppm; aerosol, vapour STEL-KZGW: 98 mg/m³; aerosol, vapour	TWA: 123 mg/m³; STEL: 25 ppm; STEL: 123 mg/m³;
Polyethylene glycol 25322-68-3	-	TWA-MAK: 500 mg/m³;	-
Isopropyl alcohol 67-63-0	TLV-NGV: 150 ppm; TLV-NGV: 350 mg/m³; STEL (Vägledande KGV): 250 ppm; STEL (Vägledande KGV): 600 mg/m³;	TWA-MAK: 200 ppm; TWA-MAK: 500 mg/m³; STEL-KZGW: 400 ppm; STEL-KZGW: 1000 mg/m³;	TWA: 400 ppm; TWA: 999 mg/m³; STEL: 500 ppm; STEL: 1250 mg/m³;
Triethanolamine 102-71-6	TLV-NGV: 5 mg/m³; TLV-NGV: 0.8 ppm; STEL (Vägledande KGV): 10 mg/m³; STEL (Vägledande KGV): 1.6 ppm; Sk	TWA-MAK: 5 mg/m³; inhalable dust STEL-KZGW: 5 mg/m³; inhalable dust	-
Sodium hydroxide 1310-73-2	TLV-NGV: 1 mg/m³; inhalable fraction STEL (Bindande KGV): 2 mg/m³; inhalable fraction	TWA-MAK: 2 mg/m³; inhalable dust STEL-KZGW: 2 mg/m³; inhalable dust	STEL: 2 mg/m³;

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Isopropyl alcohol 67-63-0	-	-	-	50 mg/L - blood (Acetone) - at the end of the work shift 50 mg/L - urine (Acetone) - at the end of the work shift	-

Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
Isopropyl alcohol 67-63-0	-	-	-	25 mg/L (whole blood - Acetone end of exposure or shift) 25 mg/L (urine - Acetone end of exposure or shift) 25 mg/L - BAT (end of exposure or end of shift) urine 25 mg/L - BAT (end of exposure or end of shift) blood	25 mg/L (whole blood - Acetone end of exposure or shift) 25 mg/L (urine - Acetone end of exposure or shift)

Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII
Isopropyl alcohol 67-63-0	-	40 mg/L (urine - Acetone end of shift at end of workweek)	-	40 mg/L - urine (Acetone) - end of shift at end of workweek

Chemical name	Latvia	Luxembourg	Romania	Slovakia
Isopropyl alcohol 67-63-0	25 mg/L - urine (Acetone) - at the end of exposure or shift 25 mg/L - blood (Acetone) - at the end of exposure	-	50 mg/L - urine (Acetone) - end of shift	-

	or shift			
Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Isopropyl alcohol 67-63-0	25 mg/L - blood (Acetone) - at the end of the work shift 25 mg/L - urine (Acetone) - at the end of the work shift	40 mg/L (urine - Acetone end of workweek)	25 mg/L (urine - Acetone end of shift) 0.4 mmol/L (urine - Acetone end of shift) 25 mg/L (whole blood - Acetone end of shift) 0.4 mmol/L (whole blood - Acetone end of shift)	-

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Hexylene glycol 107-41-5	-	63 mg/kg bw/day [4] [6]	44.43 mg/m³ [4] [6] 49 mg/m³ [5] [6] 98 mg/m³ [5] [7]
Polyethylene glycol 25322-68-3	-	112 mg/kg bw/day [4] [6]	40.2 mg/m³ [4] [6]
Isopropyl alcohol 67-63-0	-	888 mg/kg bw/day [4] [6]	500 mg/m³ [4] [6] 1000 mg/m³ [4] [7]
Triethanolamine 102-71-6	-	7.5 mg/kg bw/day [4] [6] 140 µg/cm2 [5] [6]	1 mg/m³ [5] [6]
Sodium hydroxide 1310-73-2	-	-	1 mg/m³ [5] [6]

Notes

[4] Systemic health effects.
[5] Local health effects.
[6] Long term.
[7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Hexylene glycol 107-41-5	2.25 mg/kg bw/day [4] [6]	-	7.83 mg/m³ [4] [6] 25 mg/m³ [5] [6] 49 mg/m³ [5] [7]
Polyethylene glycol 25322-68-3	40 mg/kg bw/day [4] [6]	-	7.14 mg/m³ [4] [6]
Isopropyl alcohol 67-63-0	26 mg/kg bw/day [4] [6] 51 mg/kg bw/day [4] [7]	-	89 mg/m³ [4] [6] 178 mg/m³ [4] [7]
Triethanolamine 102-71-6	3.3 mg/kg bw/day [4] [6]	70 µg/cm2 [5] [6]	0.4 mg/m³ [5] [6]
Sodium hydroxide 1310-73-2	-	-	1 mg/m³ [5] [6]

Notes

[4] Systemic health effects.
[5] Local health effects.
[6] Long term.
[7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Propylene Glycol 57-55-6	260 mg/L	183 mg/L	26 mg/L	-	-
Hexylene glycol 107-41-5	0.429 mg/L	4.29 mg/L	0.0429 mg/L	-	-
Polyethylene glycol 25322-68-3	0.273 g/L	1 mg/L	27.3 mg/L	0.1 mg/L	-
Triethanolamine 102-71-6	0.32 mg/L	5.12 mg/L	0.032 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Propylene Glycol 57-55-6	572 mg/kg sediment dw	57.2 mg/kg sediment dw	20000 mg/L	50 mg/kg soil dw	-
Hexylene glycol 107-41-5	1.59 mg/kg sediment dw	0.159 mg/kg sediment dw	20 mg/L	0.066 mg/kg soil dw	-
Polyethylene glycol 25322-68-3	1030 mg/kg sediment dw	103 mg/kg sediment dw	-	46.4 mg/kg soil dw	-
Triethanolamine 102-71-6	1.7 mg/kg sediment dw	0.17 mg/kg sediment dw	10 mg/L	0.151 mg/kg soil dw	-

8.2. Exposure controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.

Hand protection Wear suitable gloves. Gloves must conform to standard EN 374.

Skin and body protection Wear suitable protective clothing. (EN ISO 6529).

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid
Physical state Liquid
Colour Pink
Odour Perfume
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point		No data available
Boiling point or initial boiling point	> 100 °C	

and boiling range		
Flammability		No data available
Lower and upper explosion limit/flammability limit		
Upper explosion limit		No data available
Lower explosion limit		No data available
Flash point		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH	8.3	
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility		No data available
Solubility		No data available
Partition coefficient n-octanol/water (log value)		No data available
Vapour pressure		No data available
Density and/or relative density		No data available
Bulk density	1 g/mL	
Liquid Density		No data available
Relative vapour density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

9.2. Other information

Molecular weight	No information available
VOC content	No information available
Softening point	No information available

9.2.1. Information with regards to physical hazard classes

Explosives	Sensitivity to shock
Explosive properties	Not an explosive
Oxidising properties	Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity None under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. Prolonged contact may cause redness and irritation. Causes mild skin irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.

Acute toxicity Based on available data, the classification criteria are not met.

Numerical measures of toxicity
The following ATE values have been calculated for the mixture:

ATEmix (oral)	64,115.60 mg/kg
ATEmix (dermal)	145,042.00 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene Glycol	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	> 317 042 mg/m³ (Rabbit) 2h
Hexylene glycol	= 3700 mg/kg (Rat)	= 12300 mg/kg (Rabbit)	> 310 mg/m³ (Rat) 1 h
Polyethylene glycol	= 22 g/kg (Rat)	> 20 g/kg (Rabbit)	-
Isopropyl alcohol	4710 - 5840 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	> 10000 ppm (Rat) 6 h
Triethanolamine	= 4190 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	-
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

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

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

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

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Propylene Glycol 57-55-6	EC50: 24200 mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 40613 mg/L (96h, Oncorhynchus mykiss)	-	LC50: 18340 mg/L (48h, Ceriodaphnia dubia)
Hexylene glycol 107-41-5	-	LC50: 10500 - 11000mg/L (96h, Pimephales promelas) LC50: =10000mg/L (96h, Lepomis macrochirus) LC50: =8690mg/L (96h, Pimephales promelas) LC50: =10700mg/L (96h, Pimephales promelas)	-	EC50: 2700 - 3700mg/L (48h, Daphnia magna)
Isopropyl alcohol 67-63-0	EC50: >1000mg/L (96h, Desmodesmus subspicatus) EC50: >1000mg/L (72h, Desmodesmus subspicatus)	LC50: =9640mg/L (96h, Pimephales promelas) LC50: =11130mg/L (96h, Pimephales promelas) LC50: >1400000µg/L (96h, Lepomis macrochirus)	-	EC50: =13299mg/L (48h, Daphnia magna)

Triethanolamine 102-71-6	EC50: =216mg/L (72h, Desmodesmus subspicatus) EC50: =169mg/L (96h, Desmodesmus subspicatus)	LC50: 10600 - 13000mg/L (96h, Pimephales promelas) LC50: >1000mg/L (96h, Pimephales promelas) LC50: 450 - 1000mg/L (96h, Lepomis macrochirus)	-	-
Sodium hydroxide 1310-73-2	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-	-

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Propylene Glycol	-1.07
Hexylene glycol	0.14
Isopropyl alcohol	0.05
Triethanolamine	-2.53

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Propylene Glycol 57-55-6	Not PBT/vPvB
Hexylene glycol 107-41-5	Not PBT/vPvB
Polyethylene glycol 25322-68-3	Not PBT/vPvB
Isopropyl alcohol 67-63-0	Not PBT/vPvB
Triethanolamine 102-71-6	Not PBT/vPvB
Sodium hydroxide 1310-73-2	Not PBT/vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met.

12.7. Other adverse effects

Other adverse effects No information available.

PMT or vPvM properties	Based on available data, the classification criteria are not met.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
Waste codes / waste designations according to EWC / AVV	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IATA	Not regulated
14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user Special Provisions	None
IMDG	Not regulated
14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available
RID	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user Special Provisions	None
ADR	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user Special Provisions	None
ADN	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated

14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not applicable
14.5 Environmental hazard Not applicable
14.6 Special precautions for user
Special Provisions None

SECTION 15: Regulatory information

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

National regulations

France
Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Propylene Glycol - 57-55-6	RG 84
Hexylene glycol - 107-41-5	RG 84
Isopropyl alcohol - 67-63-0	RG 84
Triethanolamine - 102-71-6	RG 49

Germany
Water hazard class (WGK) slightly hazardous to water (WGK 1)
Chemical Prohibition Ordinance (ChemVerbotsV) Not applicable

TRGS 905 Not applicable

Switzerland
Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018 Group I
Storage of Hazardous Material SC 10/12
WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20 Class B
Major Accidents Ordinance SR 814.012 Not applicable

European Union
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Hexylene glycol - 107-41-5	75	-
Isopropyl alcohol - 67-63-0	75	-
Sodium hydroxide - 1310-73-2	75.	-

Persistent Organic Pollutants
Not applicable

Ozone-depleting substances (ODS) regulation (EC) 2024/590
Not applicable.

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)

Isopropyl alcohol - 67-63-0	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4: Food and feed area Product-type 1: Human hygiene

Explosives Precursors Marketing and Use (2019/1148)
Not applicable

International Inventories
Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of any hazard and/or precautionary statements referred to under Sections 2-15
H225 - Highly flammable liquid and vapour
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves, protective clothing, eye protection and face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
AIDII	Italian Association of Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DFG	German Research Foundation
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
ECHA	European Chemicals Agency
EC Number	European Community number
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)

EPA	Environmental Protection Agency
EWC	European Waste Codes
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organisation
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organisation for Standardisation
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MAL	Measuring Technical Hygienic Air Needs
MARPOL	International Convention for the Prevention of Pollution from Ships
MDLPS	Ministry of Labour and Social Policy
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
SVHC	Substance of very high concern
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TRGS	Technical Rule for Hazardous Substances
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitiser
RS	Respiratory Sensitiser

S	Sensitiser
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	On basis of test data
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	On basis of test data
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Chronic aquatic toxicity	Calculation method
Acute aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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End of Safety Data Sheet