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 22-Dec-2022 **Revision date** 17-Mar-2025 **Revision Number** 2

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

1.1. Product identifier

Product Code(s) 520073

Product Name DRYWASH II

Synonyms None

Pure substance/mixture Mixture

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

Recommended use Embalming Cosmetic

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

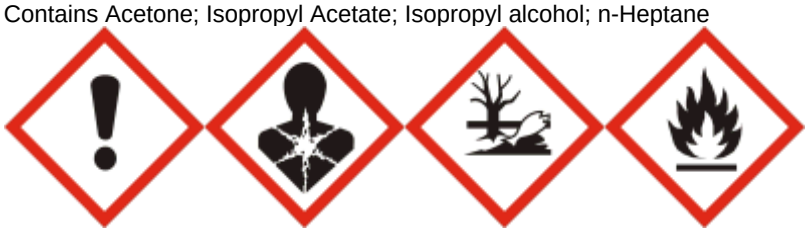
2.1. Classification of the substance or mixture

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

Flammable liquids	Category 2 - (H225)
Skin irritation	Category 2 - (H315)
Eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Category 3 Narcotic effects	
Aspiration hazard	Category 1 - (H304)
Hazardous to the aquatic environment - acute	Category 1 - (H400)
Hazardous to the aquatic environment - chronic	Category 1 - (H410)

2.2. Label elements

Contains Acetone; Isopropyl Acetate; Isopropyl alcohol; n-Heptane



Signal word
Danger

Hazard statements
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H225 - Highly flammable liquid and vapour.
H410 - Very toxic to aquatic life with long lasting effects.
EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements - EU (§28, 1272/2008)
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 - Do NOT induce vomiting.
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.
P391 - Collect spillage.

Unknown aquatic toxicity Contains 5.936 % of components with unknown hazards to the aquatic environment.

Additional information
This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public. This product requires child resistant fastenings when supplied to the general public unless the product is placed on the market in the form of aerosols or in a container with a sealed spray attachment.

2.3. Other hazards

Other hazards No information available.

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
Acetone 67-64-1	25 - < 50	No data available	200-662-2 (606-001-00-8)	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336) (EUH066)	-	-	-	-
n-Heptane 142-82-5	25 - < 50	No data available	205-563-8 (601-008-00-2)	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) STOT SE 3 (H336) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-	C
Isopropyl Acetate 108-21-4	5 - < 10	No data available	203-561-1 (607-024-00-6)	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336) (EUH066)	-	-	-	C
Isopropyl alcohol 67-63-0	3 - < 5	No data available	200-661-7	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336)	-	-	-	-

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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
Acetone 67-64-1	5800	15715.7	100.2	No data available	No data available
n-Heptane 142-82-5	No data available	3000	29.3193	No data available	No data available
Isopropyl Acetate 108-21-4	3000	17453.436	101.2	No data available	No data available
Isopropyl alcohol 67-63-0	4710	4059	No data available	30.1002	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. Immediate medical attention is required.

Inhalation Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

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

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

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

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Effects of Exposure None known.

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

Note to doctors Because of the danger of aspiration, emesis or gastric lavage should not be used unless the

risk is justified by the presence of additional toxic substances.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Do not use straight streams, Full water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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 Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. 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 Do not allow into any sewer, on the ground or into any body of water. Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

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 11 for more information See section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. 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. Take off contaminated clothing and wash it before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store away from other materials.

Storage class (TRGS 510)

LGK 3.

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
Acetone 67-64-1	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA-TMW: 500 ppm; TWA-TMW: 1200 mg/m³; STEL-KZGW: 2000 ppm (4 X 15 min); STEL-KZGW: 4800 mg/m³ (4 X 15 min);	TWA: 246 ppm; TWA: 594 mg/m³; STEL: 492 ppm; STEL: 1187 mg/m³;	TWA: 600 mg/m³; STEL: 1400 mg/m³;	TWA-GVI: 500 ppm; TWA-GVI: 1210 mg/m³;
n-Heptane 142-82-5	TWA: 500 ppm; TWA: 2085 mg/m³;	TWA-TMW: 500 ppm; TWA-TMW: 2000 mg/m³; STEL-KZGW: 2000 ppm (4 X 15 min); STEL-KZGW: 8000 mg/m³ (4 X 15 min);	TWA: 400 ppm; TWA: 1664 mg/m³; STEL: 500 ppm; STEL: 2085 mg/m³;	TWA: 1600 mg/m³;	TWA-GVI: 500 ppm; TWA-GVI: 2085 mg/m³; Sk
Isopropyl Acetate 108-21-4	-	TWA-TMW: 100 ppm; TWA-TMW: 420 mg/m³;	TWA: 100 ppm; TWA: 424 mg/m³; STEL: 200 ppm; STEL: 849 mg/m³;	-	STEL-KGVI: 200 ppm; STEL-KGVI: 849 mg/m³;

		STEL-KZGW: 100 ppm (); STEL-KZGW: 420 mg/m³ (); Ceiling: 100 ppm; Ceiling: 420 mg/m³;			
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;
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Acetone 67-64-1	TWA: 500 ppm; TWA: 1210 mg/m³; pSk	TWA: 800 mg/m³; Ceiling: 1500 mg/m³;	TWA: 250 ppm; TWA: 600 mg/m³; STEL: 500 ppm; STEL: 1200 mg/m³;	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA: 500 ppm; TWA: 1200 mg/m³; STEL: 630 ppm; STEL: 1500 mg/m³;
n-Heptane 142-82-5	TWA: 500 ppm; TWA: 2085 mg/m³;	TWA: 1000 mg/m³; Ceiling: 2000 mg/m³;	TWA: 200 ppm; TWA: 820 mg/m³; STEL: 400 ppm; STEL: 1640 mg/m³;	TWA: 500 ppm; TWA: 2085 mg/m³;	TWA: 300 ppm; TWA: 1200 mg/m³; STEL: 500 ppm; STEL: 2100 mg/m³;
Isopropyl Acetate 108-21-4	-	TWA: 800 mg/m³; Ceiling: 1000 mg/m³;	TWA: 150 ppm; TWA: 625 mg/m³; STEL: 300 ppm; STEL: 1250 mg/m³;	-	TWA: 100 ppm; TWA: 420 mg/m³; STEL: 200 ppm; STEL: 850 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;
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Acetone 67-64-1	TWA-VME: 500 ppm; TWA-VME: 1210 mg/m³; STEL-VLCT: 1000 ppm; STEL-VLCT: 2420 mg/m³;	TWA-AGW; 500 ppm (exposure factor 2); TWA-AGW; 1200 mg/m³ (exposure factor 2);	TWA-MAK: 500 ppm; I(2); TWA-MAK: 1200 mg/m³; I(2); Peak: 1000 ppm; Peak: 2400 mg/m³;	TWA: 1780 mg/m³; STEL: 3560 mg/m³;	TWA-AK: 500 ppm; TWA-AK: 1210 mg/m³;
n-Heptane 142-82-5	TWA-VME: 400 ppm; TWA-VME: 1668 mg/m³; STEL-VLCT: 500 ppm; STEL-VLCT: 2085 mg/m³;	TWA-AGW; 500 ppm (exposure factor 1); TWA-AGW; 2100 mg/m³ (exposure factor 1);	TWA-MAK: 500 ppm; I(1); TWA-MAK: 2100 mg/m³; I(1); Peak: 500 ppm; Peak: 2100 mg/m³;	TWA: 500 ppm; TWA: 2000 mg/m³; STEL: 500 ppm; STEL: 2000 mg/m³;	TWA-AK: 2000 mg/m³;
Isopropyl Acetate 108-21-4	TWA-VME: 250 ppm; TWA-VME: 950 mg/m³; STEL-VLCT: 300 ppm; STEL-VLCT: 1140 mg/m³;	-	TWA-MAK: 100 ppm; I(2); TWA-MAK: 420 mg/m³; I(2); Peak: 200 ppm; Peak: 840 mg/m³;	TWA: 250 ppm; TWA: 950 mg/m³; STEL: 275 ppm; STEL: 1140 mg/m³;	TWA-AK: 420 mg/m³; TWA-AK: 100 ppm;
Isopropyl alcohol 67-63-0	STEL-VLCT: 400 ppm; STEL-VLCT: 980	TWA-AGW; 200 ppm (exposure factor 2);	TWA-MAK: 200 ppm; II(2); TWA-MAK: 500	TWA: 400 ppm; TWA: 980 mg/m³; STEL: 500 ppm;	TWA-AK: 500 mg/m³; TWA-AK: 200 ppm;

	mg/m³;	TWA-AGW; 500 mg/m³ (exposure factor 2);	mg/m³; II(2); Peak: 400 ppm; Peak: 1000 mg/m³;	STEL: 1225 mg/m³;	STEL-CK: 1000 mg/m³; STEL-CK: 400 ppm; pSk
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Acetone 67-64-1	TWA: 500 ppm; TWA: 1210 mg/m³; STEL: 1500 ppm (calculated); STEL: 3630 mg/m³ (calculated);	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA: 250 ppm; TWA: 594 mg/m³; STEL (REL): 500 ppm; STEL (REL): 1187 mg/m³;	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA-IPRD: 500 ppm; TWA-IPRD: 1210 mg/m³; STEL-TPRD: 1000 ppm; STEL-TPRD: 2420 mg/m³;
n-Heptane 142-82-5	TWA: 500 ppm; TWA: 2085 mg/m³; STEL: 1500 ppm (calculated); STEL: 6255 mg/m³ (calculated);	TWA: 500 ppm; TWA: 2085 mg/m³;	TWA: 400 ppm; TWA: 1639 mg/m³; STEL (REL): 500 ppm; STEL (REL): 2049 mg/m³;	TWA: 85 ppm; TWA: 350 mg/m³; STEL: 500 ppm; STEL: 2085 mg/m³;	TWA-IPRD: 500 ppm; TWA-IPRD: 2085 mg/m³; STEL-TPRD: 750 ppm; STEL-TPRD: 3128 mg/m³;
Isopropyl Acetate 108-21-4	TWA: 100 ppm; STEL: 150 ppm;	-	TWA: 100 ppm; TWA: 418 mg/m³; STEL (REL): 200 ppm; STEL (REL): 836 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;
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Acetone 67-64-1	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA: 500 ppm; TWA: 1210 mg/m³; STEL: 1 ppm; STEL: 2420 mg/m³;	TWA: 125 ppm; TWA: 295 mg/m³; STEL: 156.25 ppm (value calculated); STEL: 368.75 mg/m³ (value calculated);	TWA-NDS: 600 mg/m³; STEL-NDSCh: 1800 mg/m³;
n-Heptane 142-82-5	TWA: 500 ppm; TWA: 2085 mg/m³;	TWA: 500 ppm; TWA: 2085 mg/m³;	TWA: 288 ppm; TWA: 1200 mg/m³; STEL: 384 ppm; STEL: 1600 mg/m³;	TWA: 200 ppm; TWA: 800 mg/m³; STEL: 250 ppm (value calculated); STEL: 1000 mg/m³ (value calculated);	TWA-NDS: 1200 mg/m³; STEL-NDSCh: 2000 mg/m³;
Isopropyl Acetate 108-21-4	-	-	-	TWA: 100 ppm; TWA: 420 mg/m³; STEL: 150 ppm (value calculated); STEL: 525 mg/m³ (value calculated);	TWA-NDS: 600 mg/m³; STEL-NDSCh: 1000 mg/m³;

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
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Acetone 67-64-1	TWA (VLE-MP): 500 ppm; TWA (VLE-MP): 1210 mg/m³; STEL (VLE-CD): 750 ppm;	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA: 500 ppm; TWA: 1210 mg/m³;	TWA: 500 ppm; TWA: 1210 mg/m³; STEL: 2420 mg/m³; STEL: 1000 ppm;	TWA-(VLA-ED): 500 ppm; TWA-(VLA-ED): 1210 mg/m³;
n-Heptane 142-82-5	TWA (VLE-MP): 500 ppm; TWA (VLE-MP): 2085 mg/m³; STEL (VLE-CD): 500 ppm;	TWA: 500 ppm; TWA: 2085 mg/m³; STEL: 1000 mg/m³;	TWA: 500 ppm; TWA: 2085 mg/m³;	TWA: 500 ppm; TWA: 2085 mg/m³; STEL: 500 ppm; STEL: 2085 mg/m³;	TWA-(VLA-ED): 500 ppm; TWA-(VLA-ED): 2085 mg/m³;
Isopropyl Acetate 108-21-4	TWA (VLE-MP): 100 ppm; STEL (VLE-CD): 200 ppm;	TWA: 96 ppm; TWA: 400 mg/m³; STEL: 144 ppm; STEL: 600 mg/m³;	-	-	TWA-(VLA-ED): 100 ppm; TWA-(VLA-ED): 425 mg/m³; STEL (VLA-EC): 200 ppm; STEL (VLA-EC): 850 mg/m³;
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;

Chemical name	Sweden	Switzerland	United Kingdom
Acetone 67-64-1	TLV-NGV: 250 ppm; TLV-NGV: 600 mg/m³; STEL (Vägledande KGV): 500 ppm; STEL (Vägledande KGV): 1200 mg/m³;	TWA-MAK: 500 ppm; TWA-MAK: 1200 mg/m³; STEL-KZGW: 1000 ppm; STEL-KZGW: 2400 mg/m³;	TWA: 500 ppm; TWA: 1210 mg/m³; STEL: 1500 ppm; STEL: 3620 mg/m³;
n-Heptane 142-82-5	TLV-NGV: 200 ppm; TLV-NGV: 800 mg/m³; STEL (Vägledande KGV): 300 ppm; STEL (Vägledande KGV): 1200 mg/m³;	TWA-MAK: 400 ppm; TWA-MAK: 1600 mg/m³; STEL-KZGW: 400 ppm; STEL-KZGW: 1600 mg/m³;	TWA: 500 ppm; TWA: 2085 mg/m³; STEL: 1500 ppm; STEL: 6255 mg/m³;
Isopropyl Acetate 108-21-4	-	TWA-MAK: 100 ppm; TWA-MAK: 420 mg/m³; STEL-KZGW: 200 ppm; STEL-KZGW: 840 mg/m³;	STEL: 200 ppm; STEL: 849 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;

Note See section 16 for terms and abbreviations

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Acetone 67-64-1	-	-	80 mg/L - urine (Acetone) - at the end of exposure or end of work shift	20.0 mg/L - blood (Acetone) - at the end of the work shift 20.0 mg/g Creatinine - urine (Acetone) - at the end of the work shift	-
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
Acetone 67-64-1	-	-	- urine (Acetone) - end of shift	50 mg/L (urine - Acetone end of exposure or shift) 50 mg/L - BAT (end of exposure or end of shift) urine 2.5 mg/L - BAR (end of exposure or end of shift) urine	50 mg/L (urine - Acetone end of exposure or shift)
n-Heptane 142-82-5	-	-	-	250 µg/L (urine - Heptan-2,5-dione end of exposure or shift) 250 µg/L - BAT (end of exposure or end of shift) urine	250 µg/L (urine - Heptan-2,5-dione end of exposure or shift)
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
Acetone 67-64-1	-	50 mg/L (urine - Acetone end of shift)	-	25 mg/L - urine (Acetone) - end of shift
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
Acetone 67-64-1	80 mg/L - urine (Acetone) - at the end of exposure or shift	-	50 mg/L - urine (Acetone) - end of shift	80 mg/L (urine - Acetone end of exposure or work shift)
Isopropyl alcohol 67-63-0	25 mg/L - urine (Acetone) - at the end of exposure	-	50 mg/L - urine (Acetone) - end of shift	-

	or shift 25 mg/L - blood (Acetone) - at the end of exposure or shift			
Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Acetone 67-64-1	80.0 mg/L - urine (Acetone) - at the end of the work shift	50 mg/L (urine - Acetone end of shift)	50 mg/L (urine - Acetone end of shift) 0.86 mmol/L (urine - Acetone end of shift)	-
n-Heptane 142-82-5	-	-	200 µg/L (urine - Heptan-2 5-dione end of shift)	-
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
Acetone 67-64-1	-	186 mg/kg bw/day [4] [6]	1210 mg/m³ [4] [6] 2420 mg/m³ [5] [7]
n-Heptane 142-82-5	-	300 mg/kg bw/day [4] [6]	2085 mg/m³ [4] [6]
Isopropyl Acetate 108-21-4	-	27 mg/kg bw/day [4] [6]	275 mg/m³ [4] [6] 558 mg/m³ [4] [7] 227 mg/m³ [5] [6]
Isopropyl alcohol 67-63-0	-	888 mg/kg bw/day [4] [6]	500 mg/m³ [4] [6] 1000 mg/m³ [4] [7]

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
Acetone 67-64-1	62 mg/kg bw/day [4] [6]	-	200 mg/m³ [4] [6]
n-Heptane 142-82-5	149 mg/kg bw/day [4] [6]	-	447 mg/m³ [4] [6]
Isopropyl Acetate 108-21-4	16 mg/kg bw/day [4] [6]	-	168 mg/m³ [4] [6] 335 mg/m³ [4] [7] 136 mg/m³ [5] [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]

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
Acetone 67-64-1	10.6 mg/L	21 mg/L	1.06 mg/L	-	-
Isopropyl Acetate 108-21-4	0.22 mg/L	1.1 mg/L	0.022 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Acetone 67-64-1	30.4 mg/kg sediment dw	3.04 mg/kg sediment dw	100 mg/L	29.5 mg/kg soil dw	-
Isopropyl Acetate 108-21-4	1.25 mg/kg sediment dw	0.125 mg/kg sediment dw	190 mg/L	0.35 mg/kg soil dw	-

8.2. Exposure controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Personal protective equipment

Eye/face protection Eye protection must conform to standard EN 166. Tight sealing safety goggles.

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

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly.

Environmental exposure controls Avoid release to the environment. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Keep container closed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Clear liquid
Physical state Liquid
Colour Colourless
Odour Solvent
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point		No data available
Boiling point or initial boiling point and boiling range	56 °C	@ 760 mmHg

Flammability		No data available
Lower and upper explosion limit/flammability limit		
Lower explosion limit	12.8%	
Upper explosion limit	2.5%	
Flash point	< 7 °C	CC (closed cup)
Autoignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility	Miscible in water	
Solubility		No data available
Partition coefficient n-octanol/water (log value)		No data available
Vapour pressure		No data available
Density and/or relative density	0.65 @ 20°C	
Bulk density		No data available
Liquid Density		No data available
Relative vapour density	> 1	
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 at normal ambient temperatures and when used as recommended.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions.

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 Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

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

Skin contact Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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)	20,356.30 mg/kg
ATEmix (dermal)	6,376.10 mg/kg
ATEmix (inhalation-dust/mist)	190.50 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone	= 5800 mg/kg (Rat)	> 15700 mg/kg (Rabbit)	= 50100 mg/m³ (Rat) 8 h
n-Heptane	-	= 3000 mg/kg (Rabbit)	> 29.29 mg/L (Rat) 4 h
Isopropyl Acetate	= 3000 mg/kg (Rat)	> 17436 mg/kg (Rabbit)	= 50600 mg/m³ (Rat) 8 h
Isopropyl alcohol	4710 - 5840 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	> 10000 ppm (Rat) 6 h

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 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 May cause drowsiness or dizziness.

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

Aspiration hazard May be fatal if swallowed and enters airways.

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 Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 5.936 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetone 67-64-1	-	LC50: 4.74 - 6.33mL/L (96h, Oncorhynchus mykiss) LC50: 6210 - 8120mg/L (96h, Pimephales promelas) LC50: =8300mg/L (96h, Lepomis macrochirus)	EC50 = 14500 mg/L 15 min	EC50: 10294 - 17704mg/L (48h, Daphnia magna) EC50: 12600 - 12700mg/L (48h, Daphnia magna)
n-Heptane 142-82-5	-	LC50: =375.0mg/L (96h, Cichlid fish)	-	-
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)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Acetone	-0.24
n-Heptane	4.66
Isopropyl Acetate	1.03
Isopropyl alcohol	0.05

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
Acetone 67-64-1	Not PBT/vPvB
n-Heptane 142-82-5	Not PBT/vPvB
Isopropyl Acetate 108-21-4	Not PBT/vPvB
Isopropyl alcohol 67-63-0	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 Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld 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

14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	Flammable liquid, n.o.s. (Acetone, n-Heptane)
IATA Technical Name	Acetone, n-Heptane
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	A3
ERG Code	3H
Description	UN1993, Flammable liquid, n.o.s. (Acetone, n-Heptane), 3, II

IMDG

14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	Flammable liquid, n.o.s. (Acetone, n-Heptane)
Technical Name	Acetone, n-Heptane
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	Yes
Marine pollutant indicator	P
Marine pollutant name	n-Heptane
14.6 Special precautions for user	
Special Provisions	274
EmS-No.	F-E, S-E
Underlined EMS codes indicate additional advice is given in the emergency response procedures	
Description	UN1993, Flammable liquid, n.o.s. (Acetone, n-Heptane), 3, II, (7°C c.c.), Marine pollutant
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	Flammable liquid, n.o.s. (Acetone, n-Heptane)
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	UN1993, Flammable liquid, n.o.s. (Acetone, n-Heptane), 3, II, Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 601, 640D
Classification code	F1

ADR

14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	Flammable liquid, n.o.s. (Acetone, n-Heptane)
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	UN1993, Flammable liquid, n.o.s. (Acetone, n-Heptane), 3, II, (D/E), Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 601, 640C
Classification code	F1
Tunnel restriction code	(D/E)

ADN

14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	Flammable liquid, n.o.s. (Acetone, n-Heptane)

14.3 Transport hazard class(es) 3
14.4 Packing group II
Description UN1993, Flammable liquid, n.o.s. (Acetone, n-Heptane), 3, II, Environmentally Hazardous
14.5 Environmental hazard Yes
14.6 Special precautions for user
Special Provisions 274, 601, 640C
Classification code F1
Ventilation VE01
Equipment Requirements PP, EX, A

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
Acetone - 67-64-1	RG 84
n-Heptane - 142-82-5	RG 84
Isopropyl Acetate - 108-21-4	RG 84
Isopropyl alcohol - 67-63-0	RG 84

Germany
Water hazard class (WGK) obviously hazardous to water (WGK 2)
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
Acetone - 67-64-1	75	-
n-Heptane - 142-82-5	75	-
Isopropyl Acetate - 108-21-4	75	-
Isopropyl alcohol - 67-63-0	75	-

Persistent Organic Pollutants
Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)
P5a - FLAMMABLE LIQUIDS

P5b - FLAMMABLE LIQUIDS
P5c - FLAMMABLE LIQUIDS
E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

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)
This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en

Chemical name	Limit value	Upper limit value for the purpose of licensing under article 5(3)	Reportable explosives precursors
Acetone 67-64-1	-	-	Present

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
EUH066 - Repeated exposure may cause skin dryness or cracking
H225 - Highly flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves, protective clothing, eye protection and face protection
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P321 - Specific treatment (see supplemental first aid instructions on this label)
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P362 + P364 - Take off contaminated clothing and wash it before reuse
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
P261 - Avoid breathing dust, fume, gas, mist, vapors and spray
P271 - Use only outdoors or in a well-ventilated area
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable
P273 - Avoid release to the environment
P391 - Collect spillage
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P331 - Do NOT induce vomiting
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground and bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating and lighting equipment
P242 - Use non-sparking tools
P243 - Take action to prevent static discharges
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish
P403 + P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to industrial incineration plant

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	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
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

Issuing Date 02-Dec-2022

Supercedes date 22-Dec-2022

Revision date 17-Mar-2025

Revision Note Updated format.

This safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet