SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Safety data sheet according to Regulation (EC) 2020/878

Revision date 12/07/2023 **Revision Number** 1.62

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

1.1. Product identifier

Product Name Bloc'Lube Tamper Evident Seal Red

Product Code(s) BLR, EBLR10SL, EBLR15ML, ZE

Safety data sheet number 00655

Unique Formula Identifier (UFI) 67T1-U0SH-G001-A6C6

Pure substance/mixture Mixture

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

Recommended use Sealant

Uses advised against No specific uses advised against are identified

1.3. Details of the supplier of the safety data sheet

Manufacturer

ELECTROLUBE
MacDermid Alpha Electronics Solutions
ASHBY PARK, COALFIELD WAY,
ASHBY DE LA ZOUCH,
LEICESTERSHIRE LE65 1JR
UNITED KINGDOM

+44 (0)1530 419600
+44 (0)1530 416640
info@electrolube.com

Supplier

HK WENTWORTH LIMITED
32 RUE DE TOURNENFILS
91540 MENNECY
FRANCE

+33 (0) 1 82 88 47 94

info@electrolube.com

For further information, please contact

E-mail address info@electrolube.com

1.4. Emergency telephone number

Emergency Telephone POISON INFORMATION CENTRE (Beaumont Hospital, Republic of Ireland only) +353 (0)1 809 2166 (08:00 - 22:00)

Emergency Telephone - IN CASE OF EMERGENCY CALL:
+44 1865 407333 (24hr, Provided by Carechem 24)

SECTION 2: Hazards identification

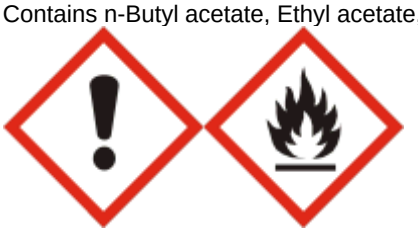
2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flammable liquids	Category 2 - (H225)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity — single exposure	Category 3 - (H336)
Category 3 Narcotic effects	

2.2. Label elements

Contains n-Butyl acetate, Ethyl acetate, Propan-2-ol



Signal word
Danger

Hazard statements
H225 - Highly flammable liquid and vapour
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
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.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

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)

n-Butyl acetate 123-86-4	30-60	01-2119485493-29-0000	204-658-1	Flam. Liq. 3 (H226) STOT SE 3 (H336)	-	-	-
Ethyl acetate 141-78-6	30-60	01-2119475103-46-0000	205-500-4	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)	-	-	-
Propan-2-ol 67-63-0	1-5	01-2119457558-25-0000	200-661-7	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)	-	-	-
Ethanol 64-17-5	1-5	01-2119457610-43-0000	200-578-6	Flam. Liq. 2 (H225)	-	-	-

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
n-Butyl acetate 123-86-4	10768	17600	0.74	No data available	No data available
Ethyl acetate 141-78-6	5620	18000	No data available	14.4131	No data available
Propan-2-ol 67-63-0	1870	4059	No data available	30.1002	No data available
Ethanol 64-17-5	7060	No data available	116.9 133.8	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. Immediate medical attention is required.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If breathing has stopped, give artificial respiration. Get medical attention immediately. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. If symptoms persist, call a doctor.

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.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor or poison control centre immediately.

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 contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapour or mist.

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

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

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

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

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. Do not breathe vapour or mist. Avoid breathing vapours or mists.

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 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 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protection equipment. 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 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. Do not breathe vapour or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Take off contaminated clothing and wash it before reuse.

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. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not breathe vapour or mist. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

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.

Storage class (TRGS 510) LGK 3.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
n-Butyl acetate 123-86-4	STEL: 723 mg/m³ STEL: 150 ppm TWA: 241 mg/m³ TWA: 50 ppm	TWA: 50 ppm TWA: 241 mg/m³ STEL 100 ppm STEL 480 mg/m³	TWA: 50 ppm TWA: 238 mg/m³ STEL: 150 ppm STEL: 712 mg/m³	STEL: 723 mg/m³ STEL: 150 ppm TWA: 241 mg/m³ TWA: 50 ppm	TWA: 50 ppm TWA: 241 mg/m³ STEL: 150 ppm STEL: 723 mg/m³
Ethyl acetate 141-78-6	STEL: 1468 mg/m³ STEL: 400 ppm TWA: 734 mg/m³ TWA: 200 ppm	TWA: 200 ppm TWA: 734 mg/m³ STEL 400 ppm STEL 1468 mg/m³	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³	STEL: 1468 mg/m³ STEL: 400 ppm TWA: 734 mg/m³ TWA: 200 ppm	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³
Ethanol 64-17-5	-	TWA: 1000 ppm TWA: 1900 mg/m³ STEL 2000 ppm STEL 3800 mg/m³	TWA: 1000 ppm TWA: 1907 mg/m³	TWA: 1000 mg/m³	TWA: 1000 ppm TWA: 1900 mg/m³
Propan-2-ol 67-63-0	-	TWA: 200 ppm TWA: 500 mg/m³ STEL 800 ppm STEL 2000 mg/m³	TWA: 200 ppm TWA: 500 mg/m³ STEL: 400 ppm STEL: 1000 mg/m³	STEL: 1225.0 mg/m³ TWA: 980.0 mg/m³	TWA: 400 ppm TWA: 999 mg/m³ STEL: 500 ppm STEL: 1250 mg/m³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
n-Butyl acetate 123-86-4	STEL: 723 mg/m³ STEL: 150 ppm TWA: 241 mg/m³ TWA: 50 ppm	TWA: 241 mg/m³ Ceiling: 723 mg/m³	TWA: 50 ppm TWA: 241 mg/m³ STEL: 723 mg/m³ STEL: 150 ppm	TWA: 241 mg/m³ TWA: 50 ppm STEL: 723 mg/m³ STEL: 150 ppm	TWA: 50 ppm TWA: 240 mg/m³ STEL: 150 ppm STEL: 725 mg/m³
Ethyl acetate 141-78-6	STEL: 1468 mg/m³ STEL: 400 ppm TWA: 734 mg/m³ TWA: 200 ppm	TWA: 700 mg/m³ Ceiling: 900 mg/m³	TWA: 150 ppm TWA: 540 mg/m³ STEL: 1468 mg/m³ STEL: 400 ppm	TWA: 150 ppm TWA: 500 mg/m³ STEL: 300 ppm STEL: 1100 mg/m³	TWA: 200 ppm TWA: 730 mg/m³ STEL: 400 ppm STEL: 1470 mg/m³
Propan-2-ol 67-63-0	-	TWA: 500 mg/m³ Ceiling: 1000 mg/m³ D*	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
Ethanol 64-17-5	-	TWA: 1000 mg/m³ Ceiling: 3000 mg/m³	TWA: 1000 ppm TWA: 1900 mg/m³ STEL: 2000 ppm STEL: 3800 mg/m³	TWA: 500 ppm TWA: 1000 mg/m³ STEL: 1000 ppm STEL: 1900 mg/m³	TWA: 1000 ppm TWA: 1900 mg/m³ STEL: 1300 ppm STEL: 2500 mg/m³
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
n-Butyl acetate 123-86-4	TWA: 50 ppm TWA: 241 mg/m³ STEL: 150 ppm STEL: 723 mg/m³	TWA: 62 ppm TWA: 300 mg/m³	TWA: 100 ppm TWA: 480 mg/m³ Peak: 200 ppm Peak: 960 mg/m³	TWA: 50 ppm TWA: 241 mg/m³ STEL: 150 ppm STEL: 723 mg/m³	sz+ TWA: 50 ppm TWA: 241 mg/m³ STEL: 150 ppm STEL: 723 mg/m³
Ethyl acetate 141-78-6	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³	TWA: 200 ppm TWA: 730 mg/m³	TWA: 200 ppm TWA: 750 mg/m³ Peak: 400 ppm Peak: 1500 mg/m³	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³	sz+ TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³
Propan-2-ol 67-63-0	STEL: 400 ppm STEL: 980 mg/m³	TWA: 200 ppm TWA: 500 mg/m³	TWA: 200 ppm TWA: 500 mg/m³ Peak: 400 ppm Peak: 1000 mg/m³	TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³	TWA: 500 mg/m³ TWA: 200 ppm STEL: 1000 mg/m³ STEL: 400 ppm b*

Ethanol 64-17-5	TWA: 1000 ppm TWA: 1900 mg/m³ STEL: 5000 ppm STEL: 9500 mg/m³	TWA: 200 ppm TWA: 380 mg/m³	TWA: 200 ppm TWA: 380 mg/m³ Peak: 800 ppm Peak: 1520 mg/m³	TWA: 1000 ppm TWA: 1900 mg/m³	TWA: 1000 ppm TWA: 1900 mg/m³ STEL: 2000 ppm STEL: 3800 mg/m³
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
n-Butyl acetate 123-86-4	STEL: 150 ppm STEL: 723 mg/m³	TWA: 241 mg/m³ TWA: 50 ppm STEL: 723 mg/m³ STEL: 150 ppm	TWA: 50 ppm TWA: 238 mg/m³ STEL: 200 ppm STEL: 950 mg/m³	TWA: 241 mg/m³ TWA: 50 ppm STEL: 723 mg/m³ STEL: 150 ppm	STEL: 723 mg/m³ STEL: 150 ppm TWA: 241 mg/m³ TWA: 50 ppm
Ethyl acetate 141-78-6	TWA: 734 mg/m³ TWA: 200 ppm STEL: 1468 mg/m³ STEL: 400 ppm	TWA: 734 mg/m³ TWA: 200 ppm STEL: 1468 mg/m³ STEL: 400 ppm	TWA: 400 ppm TWA: 1441 mg/m³	TWA: 200 mg/m³ TWA: 54 ppm STEL: 1468 mg/m³ STEL: 400 ppm	Ceiling: 300 ppm Ceiling: 1100 mg/m³ TWA: 150 ppm TWA: 500 mg/m³
Propan-2-ol 67-63-0	TWA: 200 ppm STEL: 400 ppm Sk*	-	TWA: 200 ppm TWA: 492 mg/m³ STEL: 400 ppm STEL: 983 mg/m³	TWA: 350 mg/m³ STEL: 600 mg/m³	STEL: 250 ppm STEL: 600 mg/m³ TWA: 150 ppm TWA: 350 mg/m³
Ethanol 64-17-5	STEL: 1000 ppm	-	STEL: 1000 ppm STEL: 1884 mg/m³	TWA: 1000 mg/m³	STEL: 1000 ppm STEL: 1900 mg/m³ TWA: 500 ppm TWA: 1000 mg/m³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
n-Butyl acetate 123-86-4	STEL: 723 mg/m³ STEL: 150 ppm TWA: 241 mg/m³ TWA: 50 ppm	STEL: 150 ppm STEL: 723 mg/m³ TWA: 50 ppm TWA: 214 mg/m³	TWA: 50 ppm TWA: 241 mg/m³ STEL: 150 ppm STEL: 723 mg/m³	TWA: 241 mg/m³ TWA: 50 ppm STEL: 723 mg/m³ STEL: 150 ppm	STEL: 720 mg/m³ TWA: 240 mg/m³
Ethyl acetate 141-78-6	STEL: 1468 mg/m³ STEL: 400 ppm TWA: 734 mg/m³ TWA: 200 ppm	STEL: 400 ppm STEL: 1468 mg/m³ TWA: 200 ppm TWA: 734 mg/m³	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³	STEL: 1468 mg/m³ TWA: 734 mg/m³
Propan-2-ol 67-63-0	-	-	-	TWA: 100 ppm TWA: 245 mg/m³ STEL: 150 ppm STEL: 306.25 mg/m³	STEL: 1200 mg/m³ TWA: 900 mg/m³ skóra*
Ethanol 64-17-5	-	-	TWA: 137 ppm TWA: 260 mg/m³ STEL: 1000 ppm STEL: 1900 mg/m³ H*	TWA: 500 ppm TWA: 950 mg/m³ STEL: 625 ppm STEL: 1187.5 mg/m³	TWA: 1900 mg/m³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
n-Butyl acetate 123-86-4	TWA: 50 ppm TWA: 241 mg/m³ STEL: 150 ppm STEL: 723 mg/m³	TWA: 150 ppm TWA: 715 mg/m³ STEL: 200 ppm STEL: 950 mg/m³	TWA: 100 ppm TWA: 500 mg/m³ Ceiling: 700 mg/m³	TWA: 241 mg/m³ TWA: 50 ppm STEL: 150 ppm STEL: 723 mg/m³	TWA: 50 ppm TWA: 241 mg/m³ STEL: 150 ppm STEL: 723 mg/m³
Ethyl acetate 141-78-6	TWA: 200 ppm TWA: 734 mg/m³ STEL: 1468 mg/m³ STEL: 400 ppm	TWA: 111 ppm TWA: 400 mg/m³ STEL: 139 ppm STEL: 500 mg/m³	TWA: 200 ppm TWA: 734 mg/m³ Ceiling: 1100 mg/m³	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³	TWA: 200 ppm TWA: 734 mg/m³ STEL: 400 ppm STEL: 1468 mg/m³
Propan-2-ol 67-63-0	TWA: 200 ppm STEL: 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: 200 ppm TWA: 500 mg/m³ STEL: 400 ppm STEL: 1000 mg/m³
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m³ STEL: 5000 ppm STEL: 9500 mg/m³	TWA: 500 ppm TWA: 960 mg/m³ Ceiling: 1920 mg/m³	TWA: 960 mg/m³ TWA: 500 ppm STEL: 1000 ppm STEL: 1920 mg/m³	STEL: 1000 ppm STEL: 1910 mg/m³

Chemical name	Sweden	Switzerland	United Kingdom
n-Butyl acetate	Bindande KGV: 150 ppm	TWA: 50 ppm	TWA: 150 ppm

123-86-4	Bindande KGV: 723 mg/m³ NGV: 50 ppm NGV: 241 mg/m³	TWA: 240 mg/m³ STEL: 150 ppm STEL: 720 mg/m³	TWA: 724 mg/m³ STEL: 200 ppm STEL: 966 mg/m³
Ethyl acetate 141-78-6	Bindande KGV: 300 ppm Bindande KGV: 1100 mg/m³ NGV: 150 ppm NGV: 550 mg/m³	TWA: 200 ppm TWA: 730 mg/m³ STEL: 400 ppm STEL: 1460 mg/m³	TWA: 734 mg/m³ TWA: 200 ppm STEL: 1468 mg/m³ STEL: 400 ppm
Propan-2-ol 67-63-0	Vägledande KGV: 250 ppm Vägledande KGV: 600 mg/m³ NGV: 150 ppm NGV: 350 mg/m³	TWA: 200 ppm TWA: 500 mg/m³ STEL: 400 ppm STEL: 1000 mg/m³	TWA: 400 ppm TWA: 999 mg/m³ STEL: 500 ppm STEL: 1250 mg/m³
Ethanol 64-17-5	Vägledande KGV: 1000 ppm Vägledande KGV: 1900 mg/m³ NGV: 500 ppm NGV: 1000 mg/m³	TWA: 500 ppm TWA: 960 mg/m³ STEL: 1000 ppm STEL: 1920 mg/m³	TWA: 1000 ppm TWA: 1920 mg/m³ STEL: 3000 ppm STEL: 5760 mg/m³

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Propan-2-ol 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
Propan-2-ol 67-63-0	-	-	-	25 mg/L (whole blood - Acetone end of shift) 25 mg/L (urine - Acetone end of 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 shift) 25 mg/L (urine - Acetone end of shift)

Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII
Propan-2-ol 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
Propan-2-ol 67-63-0	-	-	50 mg/L - urine (Acetone) - end of shift	-

Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Propan-2-ol 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
Ethyl acetate 141-78-6	-	63 mg/kg bw/day [4] [6]	734 mg/m³ [4] [6] 1468 mg/m³ [4] [7] 734 mg/m³ [5] [6] 1468 mg/m³ [5] [7]
polyacrylic acid 9003-01-4	-	0.56 mg/kg bw/day [4] [6]	1.97 mg/m³ [4] [6]
Ethanol 64-17-5	-	343 mg/kg bw/day [4] [6]	950 mg/m³ [4] [6] 1900 mg/m³ [5] [7]
Propan-2-ol 67-63-0	-	888 mg/kg bw/day [4] [6]	500 mg/m³ [4] [6]

[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
Ethyl acetate 141-78-6	4.5 mg/kg bw/day [4] [6]	-	367 mg/m³ [4] [6] 734 mg/m³ [4] [7] 367 mg/m³ [5] [6] 734 mg/m³ [5] [7]
polyacrylic acid 9003-01-4	0.2 mg/kg bw/day [4] [6]	-	0.348 mg/m³ [4] [6]
Ethanol 64-17-5	87 mg/kg bw/day [4] [6]	-	114 mg/m³ [4] [6] 950 mg/m³ [5] [7]
Propan-2-ol 67-63-0	26 mg/kg bw/day [4] [6]	-	89 mg/m³ [4] [6]

[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
n-Butyl acetate 123-86-4	0.18 mg/L	0.36 mg/L	0.018 mg/L	-	-
Ethyl acetate 141-78-6	0.24 mg/L	1.65 mg/L	0.024 mg/L	-	-
polyacrylic acid 9003-01-4	0.003 mg/L	0.0013 mg/L	0.0003 mg/L	0.00013 mg/L	-
Propan-2-ol 67-63-0	140.9 mg/L	140.9 mg/L	140.9 mg/L	-	-
tributyl O-acetylcitrate 77-90-7	4.6 µg/L 0.022 mg/L	46 µg/L	0.46 µg/L 0.0022 mg/L	4.6 µg/L	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
n-Butyl acetate 123-86-4	0.981 mg/kg sediment dw	0.0981 mg/kg sediment dw	35.6 mg/L	0.0903 mg/kg soil dw	-
Ethyl acetate 141-78-6	1.15 mg/kg sediment dw	0.115 mg/kg sediment dw	650 mg/L	0.148 mg/kg soil dw	0.2 g/kg food
polyacrylic acid 9003-01-4	0.0207 mg/kg sediment dw	0.00207 mg/kg sediment dw	0.9 mg/L	0.003117 mg/kg soil dw	-
Propan-2-ol 67-63-0	552 mg/kg sediment dw	552 mg/kg sediment dw	2251 mg/L	28 mg/kg soil dw	160 mg/kg food
tributyl O-acetylcitrate 77-90-7	41.5 mg/kg sediment dw	4.15 mg/kg sediment dw	2.2 µg/L 100 mg/L	8.29 mg/kg soil dw	1050 mg/kg food

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

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

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.

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. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not breathe vapour or mist. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Colour red
Odour Organic solvents.
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	75 - 80 °C	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	

Lower flammability or explosive limits	No data available	
Flash point	3.3 °C	Closed cup
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Explosive properties	Not considered to be explosive
Oxidising properties	Does not meet the criteria for classification as oxidising

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

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. Excessive heat.

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. Toxic by inhalation. (based on components). May cause drowsiness or dizziness. Harmful by inhalation.

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. May cause irritation. Prolonged contact may cause redness and 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. Coughing and/ or wheezing. Difficulty in breathing. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	3,476.40 mg/kg
ATEmix (dermal)	99,999.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapour)	99,999.00 mg/l
ATEmix (inhalation-dust/mist)	99,999.00 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
n-Butyl acetate	= 10768 mg/kg (Rat)	> 17600 mg/kg (Rabbit)	= 0.74 mg/L (Rat) 4 h
Ethyl acetate	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit)	= 4000 ppm (Rat) 4 h
Propan-2-ol	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	> 10000 ppm (Rat) 6 h
Ethanol	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat) 4 h = 133.8 mg/L (Rat) 4 h

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

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

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
n-Butyl acetate	EC50: =674.7mg/L (72h, Desmodesmus subspicatus)	LC50: =100mg/L (96h, Lepomis macrochirus) LC50: 17 - 19mg/L (96h, Pimephales promelas)	-	-
Ethyl acetate	-	LC50: 220 - 250mg/L (96h, Pimephales promelas) LC50: =484mg/L (96h, Oncorhynchus mykiss) LC50: 352 - 500mg/L (96h, Oncorhynchus mykiss)	-	EC50: =560mg/L (48h, Daphnia magna)

Propan-2-ol	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)
Ethanol	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/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
n-Butyl acetate	2.3
Ethyl acetate	0.73
Propan-2-ol	0.05
Ethanol	-0.35

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.

Chemical name	PBT and vPvB assessment
n-Butyl acetate	The substance is not PBT / vPvB PBT assessment does not apply
Ethyl acetate	The substance is not PBT / vPvB PBT assessment does not apply
Propan-2-ol	The substance is not PBT / vPvB PBT assessment does not apply
Ethanol	The substance is not PBT / vPvB PBT assessment does not apply

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects
No information available.

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.

SECTION 14: Transport information

IATA

14.1 UN number or ID number	UN1263
14.2 UN proper shipping name	PAINT
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	UN1263
14.2 UN proper shipping name	PAINT
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
EmS-No	F-E, S-E
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN1263
14.2 UN proper shipping name	PAINT
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	UN1263
14.2 UN proper shipping name	PAINT
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
Tunnel restriction code	(D/E)

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
n-Butyl acetate - 123-86-4	RG 84
Ethyl acetate - 141-78-6	RG 84
Propan-2-ol - 67-63-0	RG 84
Ethanol - 64-17-5	RG 84

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Ethanol	Present	-	Fertility Category 1A Development Category 1A Can be harmful via breastfeeding

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
Ethyl acetate - 141-78-6	Use restricted. See item 75.	-
Propan-2-ol - 67-63-0	Use restricted. See item 75.	-

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

H2 - ACUTE TOXIC
P5a - FLAMMABLE LIQUIDS
P5b - FLAMMABLE LIQUIDS
P5c - FLAMMABLE LIQUIDS

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

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

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

Propan-2-ol - 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
Ethanol - 64-17-5	Product-type 1: Human hygiene Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4: Food and feed area

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

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 H-Statements referred to under section 3
H225 - Highly flammable liquid and vapour
H226 - Flammable liquid and vapour
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Legend
SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

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
Acute aquatic toxicity	Calculation method
Chronic 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)
EPA (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)
National Institute of Technology and Evaluation (NITE)
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)
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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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
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End of Safety Data Sheet