Red First Contact Thinner

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.
According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015
Issue date: 8/23/2019 Revision date: 5/14/2024 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : Red First Contact Polymer Thinner

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

1.2.1. Relevant identified uses

Main use category : Industrial use
Use of the substance/mixture : Aerospace, Astronomical and Photonic Coatings for Surface Protection, Cleaning & Decontamination

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
Photonic Cleaning Technologies, LLC
1895 Short Lane Buildings 1 & 2
Platteville, WI 53818 USA
T 1-608-467-5396
safety@photoniccleaning.com

Distributor (if any)

1.4. Emergency telephone number

Emergency number : +1-800-255-3924 (Chemtel US) 24hrs/day 7 days/week
International Emergency:+1-813-248-0585 or please contact regional representative in your country

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended), OSHA HazCom 2012, and WHMIS 2015

Flammable liquids, Category 2	H225
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Hazard pictograms (GB CLP) :

GHS02 GHS05 GHS07

Signal word (GB CLP) : Danger
Contains : Acetone; Isopropyl alcohol; Ethyl acetate; 1,3-Dioxolane; n-Propyl acetate; Ethyl lactate

Hazard statements (GB CLP)	:	H225 - Highly flammable liquid and vapour. H318 - Causes serious eye damage. H336 - May cause drowsiness or dizziness.
Precautionary statements (GB CLP)	:	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust, fume, gas, mist, vapours or spray. P280 - Wear protective gloves, protective clothing, eye protection, face protection and hearing protection. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and international regulations.
EUH-statements (GB CLP)	:	EUH066 - Repeated exposure may cause skin dryness or cracking.
Unknown acute toxicity (GB CLP) - SDS	:	40% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Labelling according to OSHA HazCom 2012 and WHMIS 2015

Hazard pictograms (GHS) :

Signal word (GHS)	:	Danger
Hazard statements (GHS)	:	Extremely flammable liquid and vapour. Causes serious eye damage. May cause drowsiness or dizziness.
Precautionary statements (GHS)	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Unknown acute toxicity (OSHA & WHMIS)	:	Not applicable

2.3. Other hazards

Other hazards not contributing to the classification (GB CLP)	:	Not applicable
Other hazards not contributing to the classification (OSHA & WHMIS)	:	Repeated exposure may cause skin dryness or cracking.

This substance/mixture does not meet the PBT criteria of UK REACH regulation, Annex XIII
This substance/mixture does not meet the vPvB criteria of UK REACH regulation, Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

GB CLP:

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
Ethyl alcohol	CAS-No.: 64-17-5 EC-No.: 200-578-6 UK Index-No.: 603-002-00-5	20 – 60	Flam. Liq. 2, H225 Eye Irrit. 2, H319
Isopropyl alcohol	CAS-No.: 67-63-0 EC-No.: 200-661-7	10 – 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
1,3-Dioxolane	CAS-No.: 646-06-0 EC-No.: 211-463-5	20 – 45	Flam. Liq. 2, H225 Eye Dam. 1, H318
Acetone	CAS-No.: 67-64-1 EC-No.: 200-662-2	10 – 30	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
Methane, dimethoxy-	CAS-No.: 109-87-5 EC-No.: 203-714-2	10 – 30	Flam. Liq. 2, H225
Ethyl acetate	CAS-No.: 141-78-6 EC-No.: 205-500-4	< 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
n-Propyl acetate	CAS-No.: 109-60-4 EC-No.: 203-686-1	< 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
Ethyl lactate	CAS-No.: 97-64-3 EC-No.: 202-598-0	< 10	Flam. Liq. 3, H226 Eye Dam. 1, H318 STOT SE 3, H335

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

OSHA Hazcom 2012 and WHMIS 2015:

Name	Chemical name / Synonyms	Product identifier	%
Ethyl alcohol	Ethyl alcohol Methylcarbinol / Ethanol / ALCOHOL / Alcohol / Grain alcohol / Anhydrous ethanol / Alcohol (ethyl) / Alcohol anhydrous	CAS-No.: 64-17-5	20 – 60
Isopropyl alcohol	Isopropyl alcohol 2-Hydroxypropane / 2-Propyl alcohol / 2-Propanol / Isopropanol / Propan-2-ol / ISOPROPYL ALCOHOL / Propanol, 2- / Isopropylic alcohol	CAS-No.: 67-63-0	10 – 50
1,3-Dioxolane	1,3-Dioxolane 1,3-Dioxacyclopentane / Dioxolane / Ethylene glycol formal / Formal glycol / Glycol formal / Dioxolane, 1,3- / DIOXOLANE	CAS-No.: 646-06-0	20 – 45

OSHA Hazcom 2012 and WHMIS 2015:			
Name	**Chemical name / Synonyms**	**Product identifier**	**%**
Acetone	Acetone Dimethyl ketone / 2-Propanone / ACETONE / Propan-2-one / Propanone	CAS-No.: 67-64-1	10 – 30
Methane, dimethoxy-	Methane, dimethoxy- Methylal / Bis(methoxy)methane / Dimethoxymethane / Dimethyl formal / Formal / Formaldehyde dimethylacetal / Methoxymethyl methyl ether / Methylene dimethyl ether / METHYLAL	CAS-No.: 109-87-5	10 – 30
Ethyl acetate	Ethyl acetate Acetic acid, ethyl ester / Ethyl ethanoate / ETHYL ACETATE	CAS-No.: 141-78-6	<10
Ethyl lactate	Ethyl lactate ETHYL LACTATE / Ethyl DL-lactate / Ethyl 2-hydroxypropanoate / Propanoic acid, 2-hydroxy-, ethyl ester / Propanoate, 2-hydroxy-, ethyl / Lactic acid, ethyl ester / Ethyl 2-hydroxypropionate	CAS-No.: 97-64-3	<10
n-Propyl acetate	n-Propyl acetate Acetic acid, propyl ester / 1-Propyl acetate / Propyl acetate / Acetic acid, n-propyl ester / PROPYL ACETATE / Propyl acetate, n- / Propan-1-yl acetate	CAS-No.: 109-60-4	<10

***The concentrations listed represent actual ranges that result from batch variability.**

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash clothing before re-using. Get medical attention if irritation develops and persists.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Carbon dioxide (CO_2). Alcohol resistant foam.

Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon. Oxides of nitrogen. Vapours are heavier than air and may spread along floors. Be careful to flashback of fire.

Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray.

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Small spills: Let dry and peel up polymer . Rinse with water. Large spills: Dike and contain spill. Pump off product. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment. Stop leak if safe to do so.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Do not get in eyes. Avoid contact with skin and clothing. Do not swallow. Avoid breathing dust/fume/gas/mist/vapours/spray. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective clothing. Protect from sunlight.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Suitable materials for containers: Carbon steel. Iron. Stainless steel 1.4401, Stainless steel 1.4301 (V2). Tin. Tinplate. Glass. Zinc coated steel. Polyethylene. Polypropylene. Nylon. Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Protect from sunlight. Keep cool. Store locked up.

7.3. Specific end use(s)

Aerospace, Astronomical and Photonic Coatings for Surface Protection, Cleaning & Decontamination.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Ethyl alcohol (64-17-5)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	1920 mg/m³
WEL TWA (OEL TWA)	1000 ppm
WEL STEL (OEL STEL)	5760 mg/m³ (calculated)
WEL STEL (OEL STEL)	3000 ppm (calculated)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL STEL	1000 ppm
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	1900 mg/m³
OSHA PEL TWA	1000 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	3300 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	1900 mg/m³
NIOSH REL TWA	1000 ppm

Acetone (67-64-1)	
United Kingdom - Occupational Exposure Limits	
Local name	Acetone
WEL TWA (OEL TWA)	1210 mg/m³
WEL TWA (OEL TWA)	500 ppm
WEL STEL (OEL STEL)	3620 mg/m³
WEL STEL (OEL STEL)	1500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
USA - ACGIH - Occupational Exposure Limits	
Local name	Acetone
ACGIH OEL TWA	250 ppm
ACGIH OEL STEL	500 ppm

Acetone (67-64-1)	
Remark (ACGIH)	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2024
USA - ACGIH - Biological Exposure Indices	
Local name	Acetone
BEI	25 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift (nonspecific)
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Acetone
OSHA PEL TWA	2400 mg/m³
OSHA PEL TWA	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	2500 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	590 mg/m³
NIOSH REL TWA	250 ppm

Isopropyl alcohol (67-63-0)	
United Kingdom - Occupational Exposure Limits	
Local name	Propan-2-ol
WEL TWA (OEL TWA)	999 mg/m³
WEL TWA (OEL TWA)	400 ppm
WEL STEL (OEL STEL)	1250 mg/m³
WEL STEL (OEL STEL)	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
USA - ACGIH - Occupational Exposure Limits	
Local name	2-Propanol
ACGIH OEL TWA	200 ppm
ACGIH OEL STEL	400 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2023
USA - ACGIH - Biological Exposure Indices	
Local name	2-PROPANOL
BEI	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift at end of workweek (background, nonspecific)
Regulatory reference	ACGIH 2023

Isopropyl alcohol (67-63-0)	
USA - OSHA - Occupational Exposure Limits	
Local name	Isopropyl alcohol
OSHA PEL TWA	980 mg/m³
OSHA PEL TWA	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	2000 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	980 mg/m³
NIOSH REL TWA	400 ppm
NIOSH REL STEL	1225 mg/m³
NIOSH REL STEL	500 ppm

Ethyl acetate (141-78-6)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	734 mg/m³
WEL TWA (OEL TWA)	200 ppm
WEL STEL (OEL STEL)	1468 mg/m³
WEL STEL (OEL STEL)	400 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	400 ppm
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	1400 mg/m³
OSHA PEL TWA	400 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	2000 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	1400 mg/m³
NIOSH REL TWA	400 ppm

Methane, dimethoxy- (109-87-5)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	3160 mg/m³
WEL TWA (OEL TWA)	1000 ppm
WEL STEL (OEL STEL)	3950 mg/m³
WEL STEL (OEL STEL)	1250 ppm
USA - ACGIH - Occupational Exposure Limits	
1000 ppm	
USA - OSHA - Occupational Exposure Limits	
3100 mg/m³	

Methane, dimethoxy- (109-87-5)	
1000 ppm	
USA - IDLH - Occupational Exposure Limits	
2200 ppm (10% LEL)	
USA - NIOSH - Occupational Exposure Limits	
3100 mg/m³	
1000 ppm	
n-Propyl acetate (109-60-4)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	849 mg/m³
WEL TWA (OEL TWA)	200 ppm
WEL STEL (OEL STEL)	1060 mg/m³
WEL STEL (OEL STEL)	250 ppm

1,3-Dioxolane (646-06-0)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	20 ppm
Ethyl lactate (97-64-3)	
No additional information available	

n-Propyl acetate (109-60-4)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	100 ppm (Propyl acetate isomers)
ACGIH OEL STEL	150 ppm (Propyl acetate isomers)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	840 mg/m³
OSHA PEL TWA	200 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	1700 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	840 mg/m³
NIOSH REL TWA	200 ppm
NIOSH REL STEL	1050 mg/m³
NIOSH REL STEL	250 ppm

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Consult the relevant monitoring standards for the region.

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:
Safety eyewear complying with an approved standard such as the European Standard EN166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. (GB CLP)
Wear eye/face protection. (OSHA & WHMIS)

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Chemical resistant gloves (according to European standard NF EN 374-2-2003 or higher) (GB CLP). Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific place of work. For special applications, we recommend clarifying the resitance to chemicals of the aforementioned protective gloves with the glove manufacturer.
Wear suitable gloves resistant to chemical penetration. Consult glove manufacturer's product information on material suitability and material thickness. (OSHA & WHMIS)

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Not available
Odour	:	Ether-like odour.
Odour threshold	:	Not available
Melting point	:	Unknown > -95 °C (-139 °F)
Freezing point	:	Not available
Boiling point	:	Unknown < 75.6 °C (168.08 °F)
Flammability	:	Highly flammable liquid and vapour.
Explosive properties	:	None.
Oxidising properties	:	None.

Lower explosion limit	:	For liquids not relevant for classification and labelling, The lower explosion point may be 2 – 15 °C below the flash point. Linear Estimate from LEL: 2 vol% based on acetone, ethanol, isopropanol, ethyl acetate, formyl glycol 2,3,2,2,2 vol% each.
Upper explosion limit	:	For liquids not relevant for classification and labelling. Linear Estimate from UEL: 12 vol%. acetone, ethanol, isopropanol, ethyl acetate, formylglycol: 3,19,unk,11,12 vol% each.
Flash point	:	Unknown < -6 °C (21.2 °F)
Auto-ignition temperature	:	≈ 250 °C for formyl glycol (Directive 92/69/EEC, A.15)
Decomposition temperature	:	≈ 300 °C (572 °F)
pH	:	Not available
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	5 cP - 70 cP (20 °C) (68 °F)
Solubility	:	Solvents: > 1000 g/l (25 °C) (77 °F)
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	1 g/cm³ -(20 °C) (68 °F)
Relative density	:	1
Relative vapour density at 20°C	:	≈ 2 (estimated value)
Particle characteristics	:	Not applicable

Ethyl alcohol (64-17-5)	
Boiling point	78.29001 °C Atm. press.: 1013,25 hPa Decomposition: 'no'
Flash point	13 °C Atm. press.: 1 atm
Auto-ignition temperature	363 °C
Vapour pressure	57.3 hPa (at 20 °C)

Acetone (67-64-1)	
Boiling point	56.05 °C (at 1013.25 hPa)
Flash point	-20 °C
Auto-ignition temperature	465 °C
Vapour pressure	233 hPa (at 20 °C)

Isopropyl alcohol (67-63-0)	
Boiling point	82.3 °C (at 1 atm)
Flash point	12 °C
Auto-ignition temperature	399 °C
Vapour pressure	42 hPa (at 20 °C)

Ethyl acetate (141-78-6)	
Boiling point	77 °C (at 1 atm)
Flash point	-4 °C (closed cup)
Auto-ignition temperature	426.67 °C
Vapour pressure	91.84 hPa (at 18.7 °C)

1,3-Dioxolane (646-06-0)	
Boiling point	76 °C Atm. press.: 1014 hPa
Flash point	≤ 2.5 °C Atm. press.: 1026,2 hPa

1,3-Dioxolane (646-06-0)	
Vapour pressure	76 mm Hg (at 20 °C)

Methane, dimethoxy- (109-87-5)	
Boiling point	41.6 °C (at 760 mmHg)
Flash point	-30.5 °C (closed cup)
Auto-ignition temperature	237 °C
Vapour pressure	330 mm Hg (at 20 °C)

n-Propyl acetate (109-60-4)	
Boiling point	101.3 °C (at 1013 hPa)
Flash point	11.8 °C (closed cup)
Auto-ignition temperature	430 °C
Vapour pressure	33.9 hPa (at 20 °C)

Ethyl lactate (97-64-3)	
Boiling point	138.6 °C (at 1021.5 hPa)
Flash point	55 °C (closed cup)
Auto-ignition temperature	400 °C
Vapour pressure	5 mm Hg (at 30 °C)

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 5 – 18 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Reacts with : Acids. Vapours may form explosive mixture with air. Reacts with (strong) oxidizers.

10.4. Conditions to avoid

Heat. Sources of ignition. Direct sunlight. Incompatible materials.

10.5. Incompatible materials

Oxidizing agents. plastic and rubber. Acids. Bases. Amines. Oxygen. reducing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases. Formaldehyde. Hydrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified. (Based on available data, the classification criteria are not met.)
Acute toxicity (dermal) : Not classified. (Based on available data, the classification criteria are not met.)
Acute toxicity (inhalation) : Not classified. (Based on available data, the classification criteria are not met.)

Ethyl alcohol (64-17-5)	
LD50 oral rat	15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560
LD50 oral	8300 mg/kg bodyweight Animal: mouse
LD50 dermal	20000 mg/kg
LC50 inhalation rat	133.8 mg/l/4h
ATE GB CLP (oral)	8300 mg/kg bodyweight
ATE GB CLP (vapours)	133.8 mg/l/4h
ATE GB CLP (dust, mist)	133.8 mg/l/4h

Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 15700 mg/kg (Source: OECD_SIDS)
LC50 inhalation rat	50100 mg/m³ (Exposure time: 8 h Source: OECD_SIDS)
ATE GB CLP (oral)	5800 mg/kg bodyweight
ATE GB CLP (vapours)	50.1 mg/l/4h
ATE GB CLP (dust, mist)	50.1 mg/l/4h

Isopropyl alcohol (67-63-0)	
LD50 oral rat	5045 mg/kg
LD50 dermal rabbit	4059 mg/kg (Source: JAPAN_GHS)
LC50 inhalation rat	> 10000 ppm (Exposure time: 6 h Source: ECHA_API)
ATE GB CLP (oral)	5045 mg/kg bodyweight
ATE GB CLP (dermal)	4059 mg/kg bodyweight

Ethyl acetate (141-78-6)	
LD50 oral rat	5620 mg/kg (Source: NLM_CIP)
LD50 oral	4934 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 18000 mg/kg (Source: JAPAN_GHS)
LC50 inhalation rat	4000 ppm/4h
ATE GB CLP (oral)	4934 mg/kg bodyweight
ATE GB CLP (gases)	4000 ppmv/4h

1,3-Dioxolane (646-06-0)	
LD50 oral rat	3 g/kg (Source: NLM_CIP)
LD50 dermal rabbit	8480 mg/kg (Source: NLM_HSDB)
LC50 inhalation rat	68.4 mg/l/4h
ATE GB CLP (oral)	3000 mg/kg bodyweight

1,3-Dioxolane (646-06-0)	
ATE GB CLP (dermal)	8480 mg/kg bodyweight
ATE GB CLP (vapours)	68.4 mg/l/4h
ATE GB CLP (dust, mist)	68.4 mg/l/4h

Methane, dimethoxy- (109-87-5)	
LD50 oral rat	6415 – 9070 mg/kg (Source: AU_WES)
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)
ATE GB CLP (oral)	6415 mg/kg bodyweight

n-Propyl acetate (109-60-4)	
LD50 oral rat	8700 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	> 17756 mg/kg (Source: OECD_SIDS)
LC50 inhalation rat	32 mg/l/4h
ATE GB CLP (oral)	8700 mg/kg bodyweight
ATE GB CLP (vapours)	32 mg/l/4h
ATE GB CLP (dust, mist)	32 mg/l/4h

Ethyl lactate (97-64-3)	
LD50 oral rat	8200 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 5 g/kg (Source: NLM_HSDB)
ATE GB CLP (oral)	8200 mg/kg bodyweight

Unknown acute toxicity (GB CLP) - SDS : 40% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Skin corrosion/irritation : Not classified. (Based on available data, the classification criteria are not met.)

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified. (Based on available data, the classification criteria are not met.)

Germ cell mutagenicity : Not classified. (Based on available data, the classification criteria are not met.)

Carcinogenicity : Not classified. (Based on available data, the classification criteria are not met.)

Isopropyl alcohol (67-63-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified. (Based on available data, the classification criteria are not met.)

Acetone (67-64-1)	
LOAEL (animal/female, F0/P)	11298 mg/kg bodyweight Animal: mouse, Animal sex: female
NOAEL (animal/male, F0/P)	900 mg/kg bodyweight Animal: rat, Animal sex: male

STOT-single exposure : May cause drowsiness or dizziness.

Acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.

Isopropyl alcohol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

Ethyl acetate (141-78-6)	
STOT-single exposure	May cause drowsiness or dizziness.

n-Propyl acetate (109-60-4)	
STOT-single exposure	May cause drowsiness or dizziness.

Ethyl lactate (97-64-3)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified. (Based on available data, the classification criteria are not met.)

Ethyl alcohol (64-17-5)	
LOAEL (oral, rat, 90 days)	3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	1730 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:
NOAEL (subchronic, oral, animal/male, 90 days)	< 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	> 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)

Ethyl acetate (141-78-6)	
LOAEL (oral, rat, 90 days)	3600 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
NOAEL (oral, rat, 90 days)	900 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)

n-Propyl acetate (109-60-4)	
LOAEC (inhalation, rat, vapour, 90 days)	21409 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)

Ethyl lactate (97-64-3)	
NOAEL (oral, rat, 90 days)	≈ 600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified. (Based on available data, the classification criteria are not met.)

Ethyl alcohol (64-17-5)	
Viscosity, kinematic	1.492 mm²/s

Ethyl acetate (141-78-6)	
Viscosity, kinematic	0.5 mm²/s

1,3-Dioxolane (646-06-0)	
Viscosity, kinematic	< 9.434 mm²/s

n-Propyl acetate (109-60-4)	
Viscosity, kinematic	0.652 mm²/s

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified. (Based on available data, the classification criteria are not met.)
Hazardous to the aquatic environment, long–term (chronic) : Not classified. (Based on available data, the classification criteria are not met.)

Ethyl alcohol (64-17-5)	
LC50 - Fish [1]	14.2 g/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 - Crustacea [1]	9268 – 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 - Crustacea [2]	2 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	1000 mg/l
NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'
NOEC chronic crustacea	9.6 mg/l

Acetone (67-64-1)	
LC50 - Fish [1]	4.74 – 6.33 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: EPA)
LC50 - Fish [2]	6210 – 8120 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)
EC50 - Crustacea [1]	10294 – 17704 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 - Crustacea [2]	12600 – 12700 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Isopropyl alcohol (67-63-0)	
LC50 - Fish [1]	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: IUCLID)
LC50 - Fish [2]	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)
EC50 - Crustacea [1]	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)
EC50 96h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)

Ethyl acetate (141-78-6)	
LC50 - Fish [1]	220 – 250 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	484 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through] Source: IUCLID)
EC50 - Crustacea [1]	560 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC (chronic)	2.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

1,3-Dioxolane (646-06-0)	
LC50 - Fish [1]	> 95.4 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	> 772 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 877 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	197.4 mg/l Test organisms (species): other:Daphnid. Species not further specified
NOEC chronic fish	546.3 mg/l Test organisms (species): no data Duration: '30 d'

Methane, dimethoxy- (109-87-5)	
LC50 - Fish [1]	6260 – 7800 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1200 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	9120 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	874.12 mg/l Test organisms (species): other:algae
NOEC (chronic)	150.5 mg/l Test organisms (species): Daphnia magna Duration: '30 d'
NOEC chronic fish	450.281 mg/l Test organisms (species): other:not relevant Duration: '30 d'

n-Propyl acetate (109-60-4)	
LC50 - Fish [1]	56 – 64 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	56 – 64 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)
EC50 - Crustacea [1]	91.5 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	672 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Ethyl lactate (97-64-3)	
LC50 - Fish [1]	284312 mg/l Test organisms (species):
EC50 96h - Algae [1]	417339 mg/l Test organisms (species):

12.2. Persistence and degradability

First Contact Polymer Solutions	
Persistence and degradability	Not established.

Ethyl alcohol (64-17-5)	
Persistence and degradability	Rapidly degradable

Acetone (67-64-1)	
Persistence and degradability	Rapidly degradable

Isopropyl alcohol (67-63-0)	
Persistence and degradability	Rapidly degradable

Ethyl acetate (141-78-6)	
Persistence and degradability	Rapidly degradable

1,3-Dioxolane (646-06-0)	
Persistence and degradability	Rapidly degradable

Methane, dimethoxy- (109-87-5)	
Persistence and degradability	Rapidly degradable

n-Propyl acetate (109-60-4)	
Persistence and degradability	Rapidly degradable

Ethyl lactate (97-64-3)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

First Contact Polymer Solutions	
Bioaccumulative potential	Not established.

Ethyl alcohol (64-17-5)	
Partition coefficient n-octanol/water	-0.35 (at 24 °C (at pH 7.4)

Acetone (67-64-1)	
BCF - Fish [1]	(0.69 dimensionless)
Partition coefficient n-octanol/water	-0.24

Isopropyl alcohol (67-63-0)	
Partition coefficient n-octanol/water	0.05 (at 25 °C)

Ethyl acetate (141-78-6)	
BCF - Fish [1]	(30 dimensionless)
Partition coefficient n-octanol/water	0.73 (at 20 °C (at pH 7)

1,3-Dioxolane (646-06-0)	
Partition coefficient n-octanol/water	-0.37

Methane, dimethoxy- (109-87-5)	
Partition coefficient n-octanol/water	0

n-Propyl acetate (109-60-4)	
Partition coefficient n-octanol/water	1.4 (at 25 °C (at pH 7)

Ethyl lactate (97-64-3)	
Partition coefficient n-octanol/water	0.7 (at 25 °C (at pH >2-<8)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

First Contact Polymer Solutions
This substance/mixture does not meet the PBT criteria of UK REACH regulation, Annex XIII
This substance/mixture does not meet the vPvB criteria of UK REACH regulation, Annex XIII

12.6. Other adverse effects

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / DOT / TDG

14.1. UN number

UN-No. (ADR) : UN 1170
UN-No. (IMDG) : UN 1170
UN-No. (IATA) : UN 1170
DOT NA No : UN1170
UN-No. (TDG) : UN1170

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IMDG) : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IATA) : Ethanol solution
UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E) : UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)
Proper Shipping Name (DOT) : Ethyl alcohol solutions
Proper Shipping Name (TDG) : ETHYL ALCOHOL SOLUTION

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3
:

IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
:

IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3
:

DOT

Transport hazard class(es) (DOT) : 3
Hazard labels (DOT) : 3

TDG

Transport hazard class(es) (TDG) : 3
Hazard labels (TDG) : 3

14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (DOT) : II
Packing group (TDG) : II

14.5. Environmental hazards

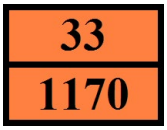
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

Overland transport

Orange plates :



EAC code : •2YE

Transport by sea
No data available

Air transport
No data available

Inland waterway transport
No data available

Rail transport
No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

VOC Directive (2004/42)

VOC content : 5 – 18 %

Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)
ANNEX II REPORTABLE EXPLOSIVES PRECURSORS
List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Acetone	67-64-1	2914 11 00	ex 3824 99 92

Please see https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Acetone		67-64-1	2914 11 00	Category 3		Annex I

15.1.2. United Kingdom

British National Regulations : Not determined.

UK REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

UK REACH Candidate List (SVHC)

Contains no substance(s) listed on the UK REACH Candidate List

US & CA Federal and State regulations:

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.
According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Indication of changes (UK , OSHA & WHMIS)			
Section	**Changed item**	**Change**	**Comments**
SDS	SDS update	Modified	V 2.0

Abbreviations and acronyms:	
	°C – Degrees Celsius °F – Degrees Fahrenheit ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road. ASTM: American Society for Testing and Materials ACGIH – American Conference of Governmental Industrial Hygienists ATE – Acute Toxicity Estimate BCF – Bioconcentration Factor BEI – Biological Exposure Index CAS – Chemical Abstracts Service CLP – Regulation (EC) No 1272/2008 on the Classification, Labeling and Packaging of substances and mixtures. CMR – Carcinogen, Mutagen, Reproductive toxin cP – centipoise (unit of dynamic viscosity) cSt – centistokes (unit of kinematic viscosity) DNEL – Derived No-effect Level DMEL – Derived Minimal Effect Level EC50 – Half maximal effective concentration ECHA – European Chemicals Agency EC-No. – European Community number EU – European Union GHS – Globally Harmonized System of Classification and Labelling of Chemicals h – Hours IATA – International Air Transport Association IC50 – Inhibition concentration IDLH – Immediately Dangerous to Life or Health IMDG – International Maritime Dangerous Goods

Abbreviations and acronyms:	
	IOELV – Indicative Occupational Exposure Limit Value KIFS – Swedish Chemicals Agency's (Keml's) Code of Statutes kPa – kilopascal Koc – Adsorption Coefficient Kow – Octanol-Water Partition Coefficient LC50 – Median Lethal Concentration LD50 – Median Lethal Dose LOAEL – Lowest Observed Adverse Effect level mg/l – Milligram per liter mg/kg – Milligram per kilogram mg/m3 – Milligram per cubic meter Min – Minutes NIOSH – National Institute for Occupational Safety and Health NOEC – No Observed Effect Concentration NO(A)EL – No Observed (Adverse) Effect Level N.O.S. – Not Otherwise Specified OEL – Occupational Exposure Limit PBT - Persistent, Bioaccumulative and Toxic PCN – Poison Centre Notification PNEC – Predicted No Effect Concentration ppm – Parts per million PVC – Polyvinyl chloride REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 RID – European Agreement concerning the International Carriage of Dangerous Goods by Rail SDS – Safety Data Sheet STEL – Short Term Exposure Limit STOT – Specific Target Organ Toxicity SVHC – Substance of Very High Concern (CMR, vPvB, PBT) TDI – Tolerable Daily Intake TLV – Threshold Limit Value TWA – Time Weighted Average UFI – Unique Formulation Identifier UN – United Nations vPvB - Very Persistent and Very Bioaccumulative WEL – Workplace Exposure Limit WGK – Wassergefahrdungklasse – German water quality classification

Revision date : 05/14/2024

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Full text of H- and EUH-statements:	
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.

Full text of H- and EUH-statements:	
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 2	H225	Calculation method
Eye Dam. 1	H318	Calculation method
STOT SE 3	H336	Calculation method

Safety Data Sheet (SDS), UK - NEXREG 2024