

# LP 289/99 RI 403

Issue date: 21/03/2017

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 07/03/2023

Supersedes version of: 31/10/2021

Version: 105.2

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

### 1.1. Product identifier

Product form : Mixture  
 Product name : LP 289/99 RI 403  
 UFI : 019F-U0D0-700P-3J5P

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

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
 Use of the substance/mixture : Anti-static agent  
 Surface coolant

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

#### Producer

Riepe GmbH & Co. KG GmbH  
 Theodor-Rosenbaum  
 32257 Bunde  
 Germany  
 T +49(0)522360990  
[info@riepe.eu](mailto:info@riepe.eu) - [www.riepe.eu](http://www.riepe.eu)

#### Distributor

Hranipex Czech Republic k.s.  
 J. Rýznerové 97, Komorovice  
 CZ- 396 01 Humpolec  
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 E-mail address of competent person responsible for the SDS :  
[sds@regartis.com](mailto:sds@regartis.com)

#### Supplier

Hranipex Ltd.  
 Unit 2 Radial Park, Birmingham Business Park  
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 T 0121 767 9180 - F 0121 782 6250  
[hranipex@hranipex.co.uk](mailto:hranipex@hranipex.co.uk) - [www.hranipex.co.uk](http://www.hranipex.co.uk)

### 1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3 H226  
 Serious eye damage/eye irritation, Category 2 H319

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

#### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes serious eye irritation.

### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.  
 H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), extinguishing powder, Water spray to extinguish.  
 P403+P235 - Store in a well-ventilated place. Keep cool.  
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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 is 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 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanol	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-43	50 – 100	Flam. Liq. 2, H225 Eye Irrit. 2, H319

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propan-2-ol; isopropyl alcohol; isopropanol	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558-25	2.5 – 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Remove contaminated clothes. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse and then wash skin thoroughly with water and soap. If symptoms persist, call a physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth with water, do not induce vomiting, call a doctor.

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

Symptoms/effects after eye contact	: Eye irritation.
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### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide. extinguishing powder. Water spray or fog. For large fire: Alcohol-resistant foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable liquid and vapour.
Explosion hazard	: Vapours may form explosive mixture with air. The vapours are denser than air and may travel along the ground. Distance ignition possible.
Hazardous decomposition products in case of fire	: On burning: release of carbon monoxide - carbon dioxide.

### 5.3. Advice for firefighters

Firefighting instructions	: During the fire of the product, keep the safe distance, use suitable breathing protection (isolation device), or self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Evacuate area.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

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**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

- Protective equipment : Wear recommended personal protective equipment. Take precautionary measures against static discharge.
- Emergency procedures : Ensure adequate ventilation. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Eliminate every possible source of ignition. Avoid contact with skin and eyes. Do not breathe vapours, spray, fume.

**6.1.2. For emergency responders**

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

**6.2. Environmental precautions**

Do not allow to enter drains or water courses. In case of loss of large quantities, advice local authorities.

**6.3. Methods and material for containment and cleaning up**

- Methods for cleaning up : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect all waste in suitable and labelled containers and dispose according to local legislation. Non-sparking tools should be used.
- Other information : Dispose of materials or solid residues at an authorized site. Ventilate spillage area.

**6.4. Reference to other sections**

Concerning personal protective equipment to use, see section 8. For further information refer to section 13. (See section 7: Handling and Storage).

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Use explosion-proof equipment. Keep container closed when not in use. Take precautionary measures to prevent the formation of static electricity. Wear personal protective equipment. Do not breathe vapours, spray. Avoid contact with skin and eyes. Immediately remove contaminated clothing or footwear.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Keep away from food and drink.

**7.2. Conditions for safe storage, including any incompatibilities**

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Keep away from sources of ignition - No smoking. Keep away from heat and direct sunlight.
- Incompatible products : Do not store near oxidizing agents.
- Storage area : Storage class: 3

**7.3. Specific end use(s)**

No additional information available

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****8.1.1 National occupational exposure and biological limit values**

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## Ethanol (64-17-5)

### United Kingdom - Occupational Exposure Limits

Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	1000 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

## propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

### United Kingdom - Occupational Exposure Limits

Local name	Propan-2-ol
WEL TWA (OEL TWA) [1]	999 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	400 ppm
WEL STEL (OEL STEL)	1250 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

<b>Ethanol (64-17-5)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - local effects, inhalation	1900 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	950 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Acute - local effects, inhalation	950 mg/m <sup>3</sup>
Long-term - systemic effects, oral	87 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	114 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	206 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC aqua (intermittent, freshwater)	2.75 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	3.6 mg/kg dwt
PNEC sediment (marine water)	2.9 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.63 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	580 mg/l

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## propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

### DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	888 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	500 mg/m <sup>3</sup> (8h)

### DNEL/DMEL (General population)

Long-term - systemic effects, oral	26 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	89 mg/m <sup>3</sup> (24h)
Long-term - systemic effects, dermal	319 mg/kg bodyweight/day

### PNEC (Water)

PNEC aqua (freshwater)	140.9 mg/l
PNEC aqua (marine water)	140.9 mg/l
PNEC aqua (intermittent, freshwater)	140.9 mg/l

### PNEC (Sediment)

PNEC sediment (freshwater)	552 mg/kg dwt
PNEC sediment (marine water)	552 mg/kg dwt

### PNEC (Soil)

PNEC soil	28 mg/kg dwt
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### PNEC (STP)

PNEC sewage treatment plant	2251 mg/l
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#### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Provide adequate general and local exhaust ventilation.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Wear proper protective equipment.

#### 8.2.2.1. Eye and face protection

##### Eye protection:

Tightly closed goggles (EN 166).

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing. Chemical resistant safety shoes

##### Hand protection:

Solvent-resistant gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemical resistant gloves (according to European standard ISO 374-1 or equivalent)	Butyl rubber	6 (> 480 minutes)	>0.7 mm	x	EN ISO 374

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## Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemical resistant gloves (according to European standard ISO 374-1 or equivalent)	Fluorocarbon rubber (Viton)	6 (> 480 minutes)	>0.7 mm	x	EN ISO 374

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. short term. Recommended: Filter AX (brown).

### 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:

Do not eat, drink or smoke when using this product. Take off contaminated clothing. Wash protective equipment and clothing before reuse. Wash hands before break and at end of works.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Blue.
Odour	: alcoholic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: > 75 K
Flammability	: Flammable liquid and vapour.
Explosive properties	: The product is not explosive. May form an explosive mixture with air.
Explosion limits	: Not available
Lower explosion limit	: 4.8 vol % (EN 1839)
Upper explosion limit	: 15 vol % (CAS 64-17-5)
Flash point	: 23.5 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 10.3
Viscosity, kinematic	: Not available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: ≈ 50 hPa
Density	: 0.87 g/cm <sup>3</sup>
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Strong oxidizing agent.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

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)

Ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg (OECD 401)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402)
LC50 Inhalation - Rat	> 50 mg/l (OECD 403)
LC50 Inhalation - Rat (Vapours)	> 20 mg/l/4h

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral rat	5840 mg/kg (OECD 401)
LD50 oral	4570 mg/kg
LD50 dermal rat	13400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	30 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)  
 pH: 10.3  
 Serious eye damage/irritation : Causes serious eye irritation.  
 pH: 10.3  
 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)  
 Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)  
 STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

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

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## Ethanol (64-17-5)

NOAEL (oral, rat, 90 days)	1760 mg/kg bodyweight/day (OECD 408, target organ: liver)
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## propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

NOAEL (oral, rat, 90 days)	900 mg/kg bodyweight/day (OECD 408)
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Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
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## 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 is 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 %
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### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
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Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)
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## Ethanol (64-17-5)

LC50 - Fish [1]	8140 mg/l (Leuciscus idus) 48h
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EC50 - Crustacea [1]	> 10000 mg/l (Daphnia magna)
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EC50 72h - Algae [1]	275 mg/l (Chlorella vulgaris) (OECD 201)
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## propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

LC50 - Fish [1]	> 100 mg/l (Leuciscus idus)
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LC50 - Fish [2]	> 10000 mg/l (Pimephales promelas) (OECD 203)
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EC50 - Crustacea [1]	> 100 mg/l (Daphnia magna)
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EC50 72h - Algae [1]	> 100 mg/l (Scenedesmus subspicatus)
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EC50 72h - Algae [2]	1050 mg/l (Pseudomonas putida) (DIN 38412 T.8)
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## 12.2. Persistence and degradability

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Persistence and degradability	Biodegradable.
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## propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

Biochemical oxygen demand (BOD)	1.72 g O <sub>2</sub> /g substance (Verordnung (EC) Nr. 440/2008, Anhang, C.)
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Chemical oxygen demand (COD)	2.23 g O <sub>2</sub> /g substance (Verordnung (EC) Nr. 440/2008, Anhang, C.)
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Biodegradation	53 % 5 d, BSB5/CS (92/69/EG (L383) C.5 * Abbaubarkeit)
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## 12.3. Bioaccumulative potential

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Bioaccumulative potential	No information available.
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### 12.4. Mobility in soil

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Ecology - soil	No information available.
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### 12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### Component

Ethanol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Endocrine disrupting properties

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 is 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 %.

### 12.7. Other adverse effects

Additional information : Do not allow product to spread into the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Do not dispose of waste into sewer.

Product/Packaging disposal recommendations : Recycling is preferred to disposal or incineration. Do not remove as household garbage.

Additional information : Flammable vapours may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

HP Code : HP3 - "Flammable:"  
 – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;  
 – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;  
 – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;  
 – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;  
 – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;  
 – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.  
 HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1987	UN 1987	UN 1987	UN 1987	UN 1987
<b>14.2. UN proper shipping name</b>				
ALCOHOLS, N.O.S.	ALCOHOLS, N.O.S.	Alcohols, n.o.s.	ALCOHOLS, N.O.S.	ALCOHOLS, N.O.S.
<b>Transport document description (ADR)</b>				
UN 1987 ALCOHOLS, N.O.S. (Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol), 3, III, (D/E)	UN 1987 ALCOHOLS, N.O.S. (Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol), 3, III	UN 1987 Alcohols, n.o.s. (Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol), 3, III	UN 1987 ALCOHOLS, N.O.S. (Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol), 3, III	UN 1987 ALCOHOLS, N.O.S. (Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol), 3, III
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

## 14.6. Special precautions for user

### Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 274, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:  
Tunnel restriction code (ADR)	: D/E
EAC code	: •3Y

### Transport by sea

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1

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Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A

## Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3, A180
ERG code (IATA)	: 3L

## Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 274, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0

## Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 274, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 30

## 14.7. Maritime transport in bulk according to IMO instruments

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)

##### EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	LP 289/99 RI403 ; Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol
3(b)	LP 289/99 RI403 ; Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol

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## EU restriction list (REACH Annex XVII)

Reference code	Applicable on
40.	Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol

### REACH Annex XIV (Authorisation List)

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

### REACH Candidate List (SVHC)

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

### 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)

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no 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)

### 15.1.2. National regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals

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 (CLP)

### United Kingdom

British National Regulations

: Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives, in the valid wording.  
 Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste, in the valid wording.  
 UK REACH.  
 GB CLP.  
 UK Waste Regulations.

## 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

### Indication of changes

Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
14.2	UN proper shipping	Modified	

### Abbreviations and acronyms:

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate

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## Abbreviations and acronyms:

DNEL	Derived-No Effect Level
EC50	Median effective concentration
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
PBT	Persistent Bioaccumulative Toxic
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA Guidance on the compilation of safety data sheets  
ECHA C&L Inventory database. Supplier's safety documents.

Training advice : Provide SDS to employees. Follow general rules on handling chemical substances and/or mixtures.

## Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H319	Causes serious eye 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. 3	H226	On basis of test data
Eye Irrit. 2	H319	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.