LP163/93 RI 006

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

Issue date: 21/03/2017 Revision date: 21/03/2023 Supersedes version of: 20/08/2021 Version: 107.1

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

1.1. Product identifier

Product form : Mixture
Product name : LP163/93 RI 006
UFI : 00NF-M0QT-F001-S7RX

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only
Use of the substance/mixture : Cleaners

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 Str. 28-30
32257 Bunde
Deutschland
T +49 (0) 5223-6874070
info@riepe.eu - www.riepe.eu

Distributor
Hranipex Czech Republic k.s.
J. Rýznerové 97, Komorovice
CZ– 396 01 Humpolec
Czech Republic
T 565 501 210
hranipex@hranipex.cz - www.hranipex.cz
E-mail address of competent person responsible for the SDS :
sds@regartis.com

Supplier
Hranipex Ltd.
Unit 2 Radial Park, Birmingham Business Park
Birmingham, B37 7YN
United Kingdom
T 0121 767 9180 - F 0121 782 6250
hranipex@hranipex.co.uk - 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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2	H225
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

Highly 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) : Danger

Hazard statements (CLP) : H225 - Highly 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 (CO2), extinguishing powder, Water spray or fog 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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
acetone; propan-2-one; propanone	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8 REACH-no: 01-2119471330-49-xxxx	10 – 20	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
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
butanone; ethyl methyl ketone	CAS-No.: 78-93-3 EC-No.: 201-159-0 EC Index-No.: 606-002-00-3 REACH-no: 01-2119457290-43	≤ 1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066

Comments : Ingredients in accordance with the Detergents Regulation (648/2004 / EC): Perfumes, d-Limonene,

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 unconscious, place in the recovery position. Never give anything by mouth to an unconscious person. 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. Drink plenty of water. Do NOT induce vomiting. Get immediate medical advice/attention.

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

Symptoms/effects after eye contact : Eye irritation.

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 : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture. Vapours are heavier than air and may spread along floors. Risk of ignition at distance.

Hazardous decomposition products in case of fire : Incomplete combustion may form carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter without an appropriate protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear proper protective equipment.

Emergency procedures : Ensure adequate ventilation. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Eliminate every possible source of ignition. Do not breathe vapours, fume. Avoid contact with skin, eyes and clothing. Prevent the build-up of electrostatic charge.

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 product to spread into the environment. Dilute with plenty of water. 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 : Ventilate spillage area.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13. (See section 7: Handling and Storage).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Good ventilation of the workplace required. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use explosion-proof equipment. Avoid the build-up of electrostatic charge. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours, spray. Avoid aerosolbuilding. Remove contaminated clothes. Keep container closed when not in use. Keep away from food, drink and animal feeding stuffs.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep in a cool place. Keep container tightly closed. Keep away from heat and direct sunlight.

Incompatible products : Do not store near oxidizing agents.

Special rules on packaging : 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

Ethanol (64-17-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m³
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/m³
WEL TWA (OEL TWA) [2]	400 ppm
WEL STEL (OEL STEL)	1250 mg/m³
WEL STEL (OEL STEL) [ppm]	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

acetone; propan-2-one; propanone (67-64-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Acetone
IOEL TWA	1210 mg/m³
IOEL TWA [ppm]	500 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	Acetone
WEL TWA (OEL TWA) [1]	1210 mg/m³
WEL TWA (OEL TWA) [2]	500 ppm
WEL STEL (OEL STEL)	3620 mg/m³
WEL STEL (OEL STEL) [ppm]	1500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

butanone; ethyl methyl ketone (78-93-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Butanone
IOEL TWA	600 mg/m³
IOEL TWA [ppm]	200 ppm
IOEL STEL	900 mg/m³
IOEL STEL [ppm]	300 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

butanone; ethyl methyl ketone (78-93-3)	
United Kingdom - Occupational Exposure Limits	
Local name	Butan-2-one (methyl ethyl ketone)
WEL TWA (OEL TWA) [1]	600 mg/m³
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	899 mg/m³
WEL STEL (OEL STEL) [ppm]	300 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
United Kingdom - Biological limit values	
Local name	Butan-2-one (methyl ethyl ketone)
BMGV	70 µmol/l Parameter: butan-2-one - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents.

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Ethanol (64-17-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	8.238 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	380 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	87 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	114 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC aqua (intermittent, freshwater)	2.75 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.6 mg/kg dwt
PNEC sediment (marine water)	2.9 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.63 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	580 mg/l

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/m³ (8h)
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	26 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	89 mg/m³ (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
PNEC (STP)	
PNEC sewage treatment plant	2251 mg/l

acetone; propan-2-one; propanone (67-64-1)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	2420 mg/m³
Long-term - systemic effects, dermal	186 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1210 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	62 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	200 mg/m³
Long-term - systemic effects, dermal	62 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	10.6 mg/l
PNEC aqua (marine water)	1.06 mg/l
PNEC aqua (intermittent, freshwater)	21 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	30.4 mg/kg dwt
PNEC sediment (marine water)	3.04 mg/kg dwt
PNEC (Soil)	
PNEC soil	29.5 mg/kg dwt

butanone; ethyl methyl ketone (78-93-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1.161 mg/kg bodyweight/day

butanone; ethyl methyl ketone (78-93-3)	
Long-term - systemic effects, inhalation	600 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	31 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	106 mg/m³
Long-term - systemic effects, dermal	412 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	55.8 mg/l
PNEC aqua (marine water)	55.8 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	284.74 mg/kg dwt
PNEC sediment (marine water)	284.74 mg/kg dwt
PNEC (Soil)	
PNEC soil	22.5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	709 mg/l

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.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:
Personal eye-protection (EN 166). Safety glasses with side shields

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing. Chemical resistant safety shoes

Hand protection:
Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Recommended materials. Butyl rubber gloves. VITON gloves. Follow the glove manufacturer's specific recommendations when selecting the appropriate thickness, material, and permeability.

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Gas filters	A/P2	Short term exposure	x

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:

Wash protective equipment and clothing before reuse. Avoid contact with skin, eyes and clothing. Always wash hands after handling the product. 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	:	red.
Odour	:	Not available
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	-80 °C
Boiling point	:	> 65 °C
Flammability	:	Not applicable
Explosion limits	:	Not available
Lower explosion limit	:	2.5 vol %
Upper explosion limit	:	15 vol % (CAS 64-17-5)
Flash point	:	< 21 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	7 – 9
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	:	247 hPa (67-64-1)
Density	:	0,81 g/cm³
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

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly 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 agents.

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	4570 mg/kg
LD50 oral	5840 mg/kg (OECD 401)
LD50 dermal rat	13400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	30 mg/l/4h

acetone; propan-2-one; propanone (67-64-1)	
LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	7426 – 15800 mg/kg
LC50 Inhalation - Rat (Vapours)	76 mg/l/4h

butanone; ethyl methyl ketone (78-93-3)	
LD50 oral rat	3300 mg/kg
LD50 dermal rabbit	5000 mg/kg
LC50 Inhalation - Rat	34.5 mg/l
LC50 Inhalation - Rat (Vapours)	40 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 7 – 9

Serious eye damage/irritation : Causes serious eye irritation.
pH: 7 – 9

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.

acetone; propan-2-one; propanone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.

butanone; ethyl methyl ketone (78-93-3)	
STOT-single exposure	May cause drowsiness or dizziness.

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

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

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 %

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)

Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

Ethanol (64-17-5)	
LC50 - Fish [1]	8140 mg/l (Leuciscus idus) 48h
EC50 - Crustacea [1]	> 10000 mg/l (Daphnia magna)
EC50 72h - Algae [1]	275 mg/l (Chlorella vulgaris) (OECD 201)

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 - Fish [1]	> 100 mg/l (Leuciscus idus)
LC50 - Fish [2]	> 10000 mg/l (Pimephales promelas) (OECD 203)
EC50 - Crustacea [1]	> 100 mg/l (Daphnia magna)
EC50 - Other aquatic organisms [1]	1050 mg/l (Pseudomonas putida) (DIN 38412 T.8)
EC50 72h - Algae [1]	> 100 mg/l (Scenedesmus subspicatus)

acetone; propan-2-one; propanone (67-64-1)	
LC50 - Fish [1]	5540 mg/l (Oncorhynchus mykiss)
LC50 - Fish [2]	7500 mg/l (Leuciscus idus)
EC50 - Crustacea [1]	8800 mg/l (Daphnia magna)
EC50 - Other aquatic organisms [1]	8300 mg/l (Lepomis macrochirus)
EC50 96h - Algae [1]	7500 mg/l (Selenastrum capricornutum)

butanone; ethyl methyl ketone (78-93-3)	
LC50 - Fish [1]	> 3000 mg/l
EC50 - Crustacea [1]	1382 mg/l

12.2. Persistence and degradability

LP163/93 RI 006	
Persistence and degradability	No information available.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Biochemical oxygen demand (BOD)	1.72 g O_2/g substance (Verordnung (EC) Nr. 440/2008, Anhang, C.)
Chemical oxygen demand (COD)	2.23 g O_2/g substance (Verordnung (EC) Nr. 440/2008, Anhang, C.)
Biodegradation	49 % ; 53 % 5 d

12.3. Bioaccumulative potential

LP163/93 RI 006	
Bioaccumulative potential	No information available.

12.4. Mobility in soil

LP163/93 RI 006	
Ecology - soil	No information available.

12.5. Results of PBT and vPvB assessment

LP163/93 RI 006
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
acetone; propan-2-one; propanone (67-64-1)	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
butanone; ethyl methyl ketone (78-93-3)	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 discharge into drains or 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.

Additional information : Flammable vapours may accumulate in the container. To be disposed of as hazardous waste. Do not remove as household garbage.

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1993	UN 1993	UN 1993	UN 1993	UN 1993
14.2. UN proper shipping name				
FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	Flammable liquid, n.o.s.	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.
Transport document description (ADR)				
UN 1993 FLAMMABLE LIQUID, N.O.S. (Ethanol ; acetone; propan-2-one; propanone), 3, II, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol, ethyl alcohol ; acetone, propan-2-one, propanone), 3, II	UN 1993 Flammable liquid, n.o.s. (ethanol, ethyl alcohol ; acetone, propan-2-one, propanone), 3, II	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol, ethyl alcohol ; acetone, propan-2-one, propanone), 3, II	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol, ethyl alcohol ; acetone, propan-2-one, propanone), 3, II
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
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, 640D

Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02, R001
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T7
Portable tank and bulk container special provisions (ADR)	:	TP1, TP8, TP28
Tank code (ADR)	:	LGBF
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	2
Special provisions for carriage - Operation (ADR)	:	S2, S20
Hazard identification number (Kemler No.)	:	33
Orange plates	:	33 1993
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•3YE

Transport by sea

Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP1, TP28, TP8
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-E
Stowage category (IMDG)	:	B

Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	3H

Inland waterway transport

Classification code (ADN)	:	F1
Special provisions (ADN)	:	274, 601, 640D
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1

Rail transport

Classification code (RID)	:	F1
Special provisions (RID)	:	274, 601, 640D
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02, R001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T7
Portable tank and bulk container special provisions (RID)	:	TP1, TP8, TP28

Tank codes for RID tanks (RID)	:	LGBF
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE7
Hazard identification number (RID)	:	33

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)	LP163/93 RI 006; Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol ; acetone; propan-2-one; propanone ; butanone; ethyl methyl ketone
3(b)	LP163/93 RI 006; Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol ; acetone; propan-2-one; propanone ; butanone; ethyl methyl ketone
40.	Ethanol ; propan-2-ol; isopropyl alcohol; isopropanol ; acetone; propan-2-one; propanone ; butanone; ethyl methyl ketone

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 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 to the relevant national contact point 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://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

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
Methylethylketone	Butanone	78-93-3	2914 12 00	Category 3		Annex I

15.1.2. National regulations

United Kingdom

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

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes

Section	Changed item	Change	Comments
	Tank special provisions (IMDG)	Modified	
	Revision date	Modified	
	Supersedes	Modified	
3	Composition/information on ingredients	Modified	
5.3	EAC code	Added	
6.3	Other information	Modified	
6.4	Reference to other sections (8, 13)	Modified	
10.5	Incompatible materials	Modified	
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added	
15.1	British National Regulations	Added	
16	Data sources	Modified	

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
PNEC	Predicted No-Effect Concentration
EC50	Median effective concentration
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
NOAEL	No-Observed Adverse Effect Level
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
SDS	Safety Data Sheet

Abbreviations and acronyms:	
PBT	Persistent Bioaccumulative Toxic
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. Normal use of this product shall imply use in accordance with the instructions on the packaging.

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