

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.12.2023

Version: 6.00 (replaces version 5.00)

Revision: 22.04.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** SONAX Engine Starter**Article number:**

03121000

UFI: 83K3-30X1-X00M-T4MR**1.2 Relevant identified uses of the substance or mixture and uses advised against****Application of the substance / the mixture**

Car care product

Consumer uses: Private households / general public / consumers

Professional uses

Uses advised against None**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

SONAX GmbH

Münchener Straße 75

D-86633 Neuburg (Donau)

Tel.: ++49 (0)8431/53-0

Further information obtainable from:

Product safety

E-mail: erp@sonax.de

Phone: + +49 (0) 8431 53 217

United Kingdom:

Anglo American Oil Company Ltd

58 Holton Road, Holton Heath Trading Park, Poole, Dorset, BH16 6LT

Telephone: (+44) 01929 551557

Email: info@aaoil.co.uk**1.4 Emergency telephone number:****European Union:** +49 (0) 89 19240 (Poison Centre Munich)**United Kingdom:** 0344 892 0111 (UK NPIS)

Members of Public in England, Scotland and Wales can contact NHS 111/NHS 24 by dialling 111

In Northern Ireland, contact your local GP

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Aerosol 1 H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms

GHS02

GHS07

GHS09

Signal word Danger**Hazard-determining components of labelling:**

diethyl ether

C6-7 Alkane/Cycloalkane

Hazard statements

H222 Extremely flammable aerosol.

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H229 Pressurised container: May burst if heated.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P261 Avoid breathing spray.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/eye protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P405 Store locked up.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:**

According to information provided in the supply chain, the mix contains less than 0.1% of any substances classified as PBT

vPvB:

According to information provided in the supply chain, the mix contains less than 0.1% of any substances classified as vPvB.

Determination of endocrine-disrupting properties

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Formulation consisting of pressurised gas and solvents with additives**Dangerous components:**

CAS: 60-29-7 EINECS: 200-467-2 Reg.nr.: 01-2119535785-29-xxxx	diethyl ether ⚠ Flam. Liq. 1, H224; ⚠ Acute Tox. 4, H302; STOT SE 3, H336, EUH019, EUH066	20-<25%
EC No 921-024-6 Reg.nr.: 01-2119475514-35-xxxx	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane Alternative CAS number: 64742-49-0 ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	15-<20%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-<15%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-<15%
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49-xxxx	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	10-<15%

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CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	3-<5%
CAS: 124-38-9 EINECS: 204-696-9	carbon dioxide ⚠ Press. Gas (Ref. Liq.), H281	3-<5%
CAS: 110-82-7 EINECS: 203-806-2 Reg.nr.: 01-2119463273-41-xxxx	cyclohexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1); ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	1-<3%
CAS: 107-98-2 EINECS: 203-539-1 Reg.nr.: 01-2119457435-35-xxxx	1-Methoxy-2-propanol ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	1-<3%
CAS: 110-54-3 EINECS: 203-777-6 Reg.nr.: 01-2119480412-44-xxxx	n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361f; STOT RE 2, H373; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336 Specific concentration limit: STOT RE 2; H373: C ≥ 5 %	<1%

Additional information:

For the wording of the listed hazard phrases refer to section 16.

Hydrocarbon mixture:

Benzene content < 0.1%

Cyclohexane is a part of the hydrocarbon mixture.

n-Hexane is a part of the hydrocarbon mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:**

Take affected persons out of danger area and lay down.

Remove soiled clothing

After inhalation:

Supply fresh air.

In the event of irritation of the respiratory tract, dizziness, nausea or unconsciousness, call medical assistance immediately.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If symptoms persist consult doctor.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** Do not induce vomiting; call for medical help immediately.**4.2 Most important symptoms and effects, both acute and delayed**

Headache

Dizziness

Drowsiness

Nausea

Skin irritation

Eye irritation

4.3 Indication of any immediate medical attention and special treatment needed

Treatment in accordance with the doctor's assessment of the patient's condition. Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents:**

Foam

Carbon dioxide

Fire-extinguishing powder

Water haze

For safety reasons unsuitable extinguishing agents: Water with full jet

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5.2 Special hazards arising from the substance or mixture*In case of fire, the following can be released:*

Carbon monoxide (CO)

Carbon dioxide (CO₂)Sulphur dioxide (SO₂)**5.3 Advice for firefighters****Protective equipment:***Do not inhale explosion gases or combustion gases.**Wear fully protective suit.**Do not enter the hazardous area without a self-contained breathing apparatus.**See Section 8 for information on personal protection equipment.***Additional information***Cool endangered receptacles with water spray.**Collect contaminated fire fighting water separately. It must not enter the sewage system.***SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures***Keep away from ignition sources.***For non-emergency personnel** *Keep away from ignition sources.***For emergency responders** *Wear protective equipment. Keep unprotected persons away.***6.2 Environmental precautions:***Do not allow to penetrate the ground/soil.**Do not allow to enter sewers/ surface or ground water.**Inform respective authorities in case of seepage into water course or sewage system.***6.3 Methods and material for containment and cleaning up:***Ensure adequate ventilation.**Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).**Dispose contaminated material as waste according to section 13.***6.4 Reference to other sections***See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.***SECTION 7: Handling and storage****7.1 Precautions for safe handling***Ensure good ventilation/exhaustion at the workplace.**Buildup of explosive mixtures possible without sufficient ventilation.***Information about fire - and explosion protection:***Keep ignition sources away - Do not smoke.**Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.**Do not spray onto a naked flame or any incandescent material.**Highly volatile, flammable constituents are released during processing.***7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:***Provide solvent resistant, sealed floor.**Observe official regulations on storing packagings with pressurised containers.***Information about storage in one common storage facility:***Store away from foodstuffs.**Observe local/state/federal regulations.***Further information about storage conditions:***Protect from heat and direct sunlight.**Store receptacle in a well ventilated area.**Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.*

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Recommended storage temperature: 20 °C.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 60-29-7 diethyl ether

WEL (Great Britain) Short-term value: 620 mg/m³, 200 ppm
Long-term value: 310 mg/m³, 100 ppm

IOELV (EU) Short-term value: 616 mg/m³, 200 ppm
Long-term value: 308 mg/m³, 100 ppm

OEL (Ireland) Short-term value: 616 mg/m³, 200 ppm
Long-term value: 308 mg/m³, 100 ppm
IOELV

CAS: 106-97-8 butane

WEL (Great Britain) Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

OEL (Ireland) Short-term value: 1000 ppm

CAS: 74-98-6 propane

OEL (Ireland) Asphx

CAS: 67-64-1 acetone

WEL (Great Britain) Short-term value: 3620 mg/m³, 1500 ppm
Long-term value: 1210 mg/m³, 500 ppm

IOELV (EU) Long-term value: 1210 mg/m³, 500 ppm

OEL (Ireland) Long-term value: 1210 mg/m³, 500 ppm
IOELV

CAS: 75-28-5 isobutane

OEL (Ireland) Short-term value: 1000 ppm

CAS: 124-38-9 carbon dioxide

WEL (Great Britain) Short-term value: 27400 mg/m³, 15000 ppm
Long-term value: 9150 mg/m³, 5000 ppm

IOELV (EU) Long-term value: 9000 mg/m³, 5000 ppm

OEL (Ireland) Long-term value: 9000 mg/m³, 5000 ppm
IOELV

CAS: 110-82-7 cyclohexane

WEL (Great Britain) Short-term value: 1050 mg/m³, 300 ppm
Long-term value: 350 mg/m³, 100 ppm

IOELV (EU) Long-term value: 700 mg/m³, 200 ppm

OEL (Ireland) Long-term value: 700 mg/m³, 200 ppm
IOELV

CAS: 107-98-2 1-Methoxy-2-propanol

WEL (Great Britain) Short-term value: 560 mg/m³, 150 ppm
Long-term value: 375 mg/m³, 100 ppm
Sk

IOELV (EU) Short-term value: 568 mg/m³, 150 ppm
Long-term value: 375 mg/m³, 100 ppm
Skin

OEL (Ireland) Short-term value: 568 mg/m³, 150 ppm
Long-term value: 375 mg/m³, 100 ppm
IOELV

CAS: 110-54-3 n-hexane

WEL (Great Britain) Long-term value: 72 mg/m³, 20 ppm

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IOELV (EU)	Long-term value: 72 mg/m ³ , 20 ppm
OEL (Ireland)	Long-term value: 72 mg/m ³ , 20 ppm IOELV, Sk

Regulatory information

WEL (Great Britain): EH40/2020

IOELV (EU): (EU) 2019/1831

OEL (Ireland): 2020 CoP for the Safety, Health and Welfare at Work

DNELs
CAS: 60-29-7 diethyl ether

Dermal	DNEL	44 mg/kg (worker) (chronic systemic effect)
Inhalative	DNEL	308 mg/m ³ (worker) (chronic systemic effect)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Oral	DNEL	699 mg/kg bw/day (consumer) (chronic exposure / systemic effects)
Dermal	DNEL	699 mg/kg bw/day (consumer) (chronic exposure / systemic effects) 773 mg/kg bw/day (worker) (chronic exposure / systemic effects)
Inhalative	DNEL	608 mg/m ³ (consumer) (chronic exposure / systemic effects) 2,035 mg/m ³ (worker) (chronic exposure / systemic effects)

CAS: 67-64-1 acetone

Dermal	DNEL	186 mg/kg (worker) (chronic systemic effect)
Inhalative	DNEL	1,210 mg/m ³ (worker) (chronic systemic effect)

CAS: 107-98-2 1-Methoxy-2-propanol

Oral	DNEL	3.3 mg/kg (consumer) (long-term / systemic effects)
Dermal	DNEL	18.1 mg/kg (consumer) (long-term / systemic effects) 50.6 mg/kg (worker) (long-term / systemic effects)
Inhalative	DNEL	43.9 mg/m ³ (consumer) (long-term / systemic effects) 553.5 mg/m ³ (worker) (short-term / local effects) 369 mg/m ³ (worker) (long-term / systemic effects)

PNECs
CAS: 60-29-7 diethyl ether

PNEC	4.2 mg/l (sewage plant)
	2 mg/l (water (fresh water))
	0.2 mg/l (water (sea water))
PNEC	9.14 mg/kg (sediment (fresh water))
	0.914 mg/kg (sediment (sea water))
	0.66 mg/kg (soil)

CAS: 67-64-1 acetone

PNEC	100 mg/l (STP)
	10.6 mg/l (water (fresh water))
	1.06 mg/l (water (sea water))
PNEC	30.4 mg/kg (sediment (fresh water))
	3.04 mg/kg (sediment (sea water))
	29.5 mg/kg (soil)

CAS: 107-98-2 1-Methoxy-2-propanol

PNEC	100 mg/l (STP)
	100 mg/l (water (intermittent release))
	10 mg/l (water (fresh water))
	1 mg/l (water (sea water))
PNEC	2.47 mg/kg (gro)
	41.6 mg/kg (sediment (fresh water))
	4.17 mg/kg (sediment (sea water))

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Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls**Suitable technical control devices**

Ensure good ventilation. This can be achieved by localised extraction or general ventilation. If this is not sufficient to keep the concentration below the occupational exposure limit, suitable breathing protection is to be worn.

Individual protection measures, such as personal protective equipment**General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

Ensure good ventilation/exhaustion at the workplace.

If the occupational exposure limit is exceeded:

The following breathing protection is recommended:

Respiratory filter for organic gases and vapours (Type A)

Identification colour: Brown

[DIN EN 14387]

Hand protection

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

[EN 374]

Penetration time of glove material Value for the permeation: Level 6 (≥ 480 min)

Eye/face protection

Safety glasses

[EN 166]

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Physical state**

Fluid

Colour:

Colourless

Odour:

Solvent-like

Melting point/freezing point:

Undetermined.

Boiling point or initial boiling point and boiling range

30 - 185 °C
(Active ingredient data)

Flammability

Extremely flammable aerosol.

Lower and upper explosion limit**Lower:**

1,7 Vol.% (Main ingredient data)

1,5 Vol.% (Propellant data)

Upper:

36 Vol.% (Main ingredient data)

10,9 Vol.% (Propellant data)

Flash point:

Not applicable, as aerosol.

Decomposition temperature:

Not determined.

pH

Not applicable.

Viscosity:**Kinematic viscosity at 40 °C**

<20.5 mm²/s (Daten Wirkstoff)

Solubility**water:**

Not miscible or difficult to mix.

Partition coefficient n-octanol/water (log value)

Not determined.

Vapour pressure:

Not determined.

Density and/or relative density**Density at 20 °C:**

0.74 - 0.75 g/cm³

(Active ingredient data)

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Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Aerosol
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Not determined.
Explosive properties:	In use, may form flammable/explosive vapour-air mixture.
Change in condition	
Evaporation rate	Not applicable.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	>85% (percent by mass) flammable components, combustion energy >30 kJ/g Extremely flammable aerosol. Pressurised container: May burst if heated.
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No dangerous reactions known.

10.2 Chemical stability Stable under normal conditions.

10.3 Possibility of hazardous reactions Develops readily flammable gases/fumes.

10.4 Conditions to avoid

An increase in pressure may lead to bursting.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Keep ignition sources away - Do not smoke.

See Section 7 for information on safe handling.

10.5 Incompatible materials: strong oxidizing agents

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

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

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

CAS: 60-29-7 diethyl ether

Oral	LD50	1,220 mg/kg (rat) 14,300 mg/kg (rabbit)
	ATE	1,220 mg/kg

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Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,920 mg/kg (rabbit) (OECD 402)
Inhalative	LC50 / 4h	>20 mg/l (rat) (OECD 403)

CAS: 67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat) (OECD 401)
Dermal	LD 50	>15,800 mg/kg (rabbit)
Inhalative	LC50 / 4h	76 mg/m ³ (rat)

CAS: 110-82-7 cyclohexane

Oral	LD50	>5,000 mg/kg (rabbit)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50 / 4h	>32,880 mg/m ³ (rat)

CAS: 107-98-2 1-Methoxy-2-propanol

Oral	LD50	4,016 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC0 / 6h	>7,000 ppm (rat)

CAS: 110-54-3 n-hexane

Oral	LD50	3,200 mg/kg (rat)
Dermal	LD50	3,350 mg/kg (rabbit)
Inhalative	LC50/4d	172 mg/l (rat)

Skin corrosion/irritation Causes skin irritation.**Serious eye damage/irritation** Causes serious eye irritation.**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure** May cause drowsiness or dizziness.**STOT-repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**Additional toxicological information:****Repeated dose toxicity****CAS: 60-29-7 diethyl ether**

Oral	LOAEL	2,000 mg/kg (rat)
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Values relevant for classification:**CAS: 60-29-7 diethyl ether**

Oral	NOAEL	500 mg/kg/day (rat)
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11.2 Information on other hazards**Endocrine disrupting properties**

According to the current state of scientific knowledge, there is no data for the product regarding endocrine disrupting properties with health effects.

None of the ingredients is listed.

SECTION 12: Ecological information**12.1 Toxicity**

Product is considered to be harmful to aquatic organisms. May have long-term harmful effects in aquatic environments.

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Aquatic toxicity:**CAS: 60-29-7 diethyl ether**

EC50 / 21 d	>100 mg/l (Daphnia magna) (OECD 211)
EbC50 / 72 h	>100 mg/l (Desmodesmus subspicatus) (OECD 201)
ErC 50 / 72h	>100 mg/l (Desmodesmus subspicatus) (OECD 201)
LOEC / 21 d	>100 mg/l (Daphnia magna) (OECD 211)
LOEC 72h	>100 mg/l (Desmodesmus subspicatus) (OECD 201)
NOEC / 21 d	100 mg/l (Daphnia magna) (OECD 211)
NOEC / 72 h	100 mg/l (Daphnia magna) (OECD 201)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

NOEC / 3 d	>0.1-≤1 mg/l (Daphnia magna)
LL50 / 96h	11.4 mg/l (Oncorhynchus mykiss) (OECD 203)
EL50 / 48h	3 mg/l (Daphnia magna) (OECD 202)
EL50 / 72h	30-100 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
LOEC	0.32 mg/l (Daphnia magna) (21d)
NOEC / 72 h	3 mg/l (Pseudokirchneriella subcapitata)

CAS: 106-97-8 butane

LC50 / 96 h	27.98 mg/l (fish)
EC50 / 4 d	7.71 mg/l (algae)

CAS: 74-98-6 propane

LC50 / 96 h	27.98 mg/l (fish)
EC50 / 96 h	7.71 mg/l (algae)

CAS: 67-64-1 acetone

LC50 / 96 h	5,540 mg/l (Oncorhynchus mykiss)
LC50 / 48h	8,800 mg/l (dp)
EC50 / 0,5h	61.15 mg/l (microorganisms)
LOEC / 28 d	1,106-2,212 mg/l (Daphnia magna)
NOEC / 28d	2,212 mg/l (Daphnia magna)

CAS: 75-28-5 isobutane

LC50 / 96 h	27.98 mg/l (fish)
EC50 / 4 d	7.71 mg/l (algae)

CAS: 110-82-7 cyclohexane

LC50 / 96h	4.53 mg/l (Pimephales promelas)
EC50 / 48h	2.4 mg/l (Daphnia magna)
EC50 / 72h	3.4 mg/l (Pseudokirchneriella subcapitata)

CAS: 107-98-2 1-Methoxy-2-propanol

LC50 / 96h	>6,800 mg/l (Leuciscus idus) (DIN38412)
LC50 / 48h	23,300 mg/l (Daphnia magna)
EC50	>1,000 mg/l (Pseudokirchneriella subcapitata) (7d)
EC50/3h	>1,000 mg/l (activated sludge) (OECD 209)

CAS: 110-54-3 n-hexane

LL50 / 96h	12.51 mg/l (Oncorhynchus mykiss)
EL50 / 48h	21.85 mg/l (Daphnia magna)

12.2 Persistence and degradability**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

Biodegradation	81 % (28d)
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CAS: 107-98-2 1-Methoxy-2-propanol

Biodegradation	90-100 % (OECD 301E)
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CAS: 110-54-3 n-hexane

Biodegradation	83 % (10d (ECHA))
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12.3 Bioaccumulative potential**CAS: 60-29-7 diethyl ether**

log Kow | 1.05

CAS: 110-82-7 cyclohexane

log Kow | 3.44 (pH: 7, 25°C)

CAS: 107-98-2 1-Methoxy-2-propanol

log Kow | ≤0.43 (25°C)

CAS: 110-54-3 n-hexane

log Kow | 4 (pH: 7, 20°C)

12.4 Mobility in soil

diethyl ether:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane:

Highly volatile, will partition rapidly to air.

12.5 Results of PBT and vPvB assessment**PBT:**

According to information provided in the supply chain, the mix contains less than 0.1% of any substances classified as PBT

vPvB:

According to information provided in the supply chain, the mix contains less than 0.1% of any substances classified as vPvB

12.6 Endocrine disrupting properties

According to the current state of scientific knowledge, there is no data for the product regarding endocrine disrupting properties with effects on the environment.

12.7 Other adverse effects**Additional ecological information:****General notes:** The product may not be released into the environment without control.**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Waste classified as hazardous according to Annex III to Directive 2008/98/EC.

Recommendation Waste must be disposed of while observing the local, official regulations.**European waste catalogue**

15 01 10*	packaging containing residues of or contaminated by hazardous substances
HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP14	Ecotoxic

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN number or ID number**

ADR/RID/ADN, IMDG, IATA

UN1950

14.2 UN proper shipping name

ADR/RID/ADN

1950 AEROSOLS

IMDG

AEROSOLS

IATA

AEROSOLS, flammable

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14.3 Transport hazard class(es)

ADR/RID/ADN



Class 2 5F Gases.
Label 2.1

IMDG, IATA



Class 2.1 Gases.
Label 2.1

14.4 Packing group

ADR/RID/ADN, IMDG, IATA Void

14.5 Environmental hazards:

Marine pollutant: Yes
absent due to package size =<5l

14.6 Special precautions for user

see Sections 6-8
Warning: Gases.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:

ADR/RID/ADN

Limited quantities (LQ) 1L
Transport category 2
Tunnel restriction code D

UN "Model Regulation": UN1950, AEROSOLS, 2.1

SECTION 15: Regulatory information

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

European Directives:

Directive 2010/75/EU (VOC) 91.67 %

Catégorie SEVESO (DIRECTIVE 2012/18/EU)

P3a FLAMMABLE AEROSOLS

E2 Hazardous to the Aquatic Environment

REGULATION (EU) 2019/1148

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

CAS: 67-64-1 | acetone

National regulations:

Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

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15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H220 Extremely flammable gas.
 H224 Extremely flammable liquid and vapour.
 H225 Highly flammable liquid and vapour.
 H226 Flammable liquid and vapour.
 H280 Contains gas under pressure; may explode if heated.
 H281 Contains refrigerated gas; may cause cryogenic burns or injury.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H361f Suspected of damaging fertility.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 EUH019 May form explosive peroxides.
 EUH066 Repeated exposure may cause skin dryness or cracking.

Classification according to Regulation (EC) No 1272/2008

Aerosols, Section 2.3.1	On basis of test data
Skin corrosion/irritation Serious eye damage/irritation Specific target organ toxicity (single exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Version number of previous version: 5.00

Abbreviations and acronyms:

vPvB: very persistent and very bioaccumulative
 PBT: persistent, bioaccumulative, toxic
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 NOEL = No Observed Effect Level
 NOEC = No Observed Effect Concentration
 LC = lethal Concentration
 EC50 = half maximal effective concentration
 log POW = Octanol / water partition coefficient
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 ATE: acute toxicity estimate
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (UK REACH)
 PNEC: Predicted No-Effect Concentration (UK REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 IOELV = indicative occupational exposure limit values
 Flam. Gas 1A: Flammable gases – Category 1A
 Aerosol 1: Aerosols – Category 1
 : Aerosols – Category 3
 Press. Gas (Comp.): Gases under pressure – Compressed gas
 Press. Gas (Ref. Liq.): Gases under pressure – Refrigerated liquefied gas
 Flam. Liq. 1: Flammable liquids – Category 1
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Repr. 2: Reproductive toxicity – Category 2

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STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
*** Data compared to the previous version altered.**

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