

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 10/25/2005 Revision date: 12/12/2022 Version: 9.0

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

1.1. Product identifier

Chemical type : Substance
Trade name : ETBE

Trade name : ETBE

EC-No. : 211-309-7 CAS-No. : 637-92-3

REACH registration No : 01-2119452785-29-0016

Product code : 19010000

IUPAC name : 2-ethoxy-2-methylpropane

Formula : C6H14O

Synonyms : ETBE, ethyl-terc- butylether

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use

Industrial/Professional use spec : Manufacture of substance

Formulation & (re)packing of substances and mixtures

Distribution of substance

Use as a fuel

Use as an intermediate : Fuels, Intermediates

Function or use category

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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Slovakia

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info@slovnaft.sk - www.slovnaft.sk

1.4. Emergency telephone number

Emergency number : Podnikový dispečing 1: ++0421(0)2/4055 3344

| Country | Organisation/Company | Address | Emergency number | Comment |
|---------|---|--|--|---------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| Israel | Israel Poison Information Center Rambam Health Care Campus | 6 Ha'Aliya Street 31096 Haifa | +972 4 854 1900 | |
| Malta | Medicines & Poisons Info Office | Mater Dei Hospital MSD 2090 Msida | +356 2545 6508 | |

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| Country | Organisation/Company | Address | Emergency number | Comment |
|----------------|--|---|------------------|-----------------------------------|
| United Kingdom | National Poisons Information Service (Belfast Centre) Royal Victoria Hospital | Grosvenor Road BT12 6BA Belfast | 0344 892 0111 | Only for healthcare professionals |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH Birmingham | 0344 892 0111 | Only for healthcare professionals |
| United Kingdom | National Poisons Information Service (Cardiff Centre) University Hospital Llandough | Penlan Road CF64 2XX Cardiff | 0344 892 0111 | Only for healthcare professionals |
| United Kingdom | National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh | Little France Crescent EH16 4SA Edinburgh | 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 London | +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 Newcastle | 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

Specific target organ toxicity – Single exposure, Category 3, Narcosis H336

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)





Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P261 - Avoid breathing dust, fume, gas, spray, vapours, mist. P243 - Take precautionary measures against static discharge.

P271 - Use only outdoors or in a well-ventilated area.

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII Endocrine disruptors: not yet evaluated

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SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name : SN / 211-309-7 / 2-ethoxy-2-methylpropane

CAS-No. : 637-92-3 EC-No. : 211-309-7

| Name | Product identifier | % |
|--|--|--------|
| 2-ethoxy-2-methylpropane (Constituent) | CAS-No.: 637-92-3 EC-No.: 211-309-7 REACH-no: 01-2119452785- 29-0017 | > 87 |
| Ethanol (Impurity) | CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610- | < 9 |
| 2-methylpropan-2-ol; tert-butyl alcohol (Impurity) | CAS-No.: 75-65-0 EC-No.: 200-889-7 EC Index-No.: 603-005-00-1 | < 2.5 |
| Diethyl ether (Impurity) | CAS-No.: 60-29-7 EC-No.: 200-467-2 EC Index-No.: 603-022-00-4 | < 0.25 |
| tert-butyl methyl ether (Impurity) | CAS-No.: 1634-04-4 EC-No.: 216-653-1 EC Index-No.: 603-181-00-X REACH-no: 01-2119452786- 27-0019 | < 0.1 |

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply. Ensure adequate ventilation and check that a safe,

breathable atmosphere is present before entry into confined spaces. Drench contaminated clothing with water before removing to avoid risk of sparks from static electricity.

clothing with water before removing to avoid risk of sparks from static electricity.

First-aid measures after inhalation : If casualty is unconscious and: If necessary, give external cardiac massage and obtain

medical advice. Place in the recovery position. Breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. Not breathing. Administer oxygen if necessary. Obtain medical attention if casualty has an

altered state of consciousness or if symptoms do not resolve.

First-aid measures after skin contact : Remove contaminated clothing, contaminated footwear and dispose of safely. Wash affected area with soap and water. Seek medical attention if skin irritation, swelling or

affected area with soap and water. Seek medical attention if skin irritation, swelling or redness develops and persists. Do not wait for symptoms to develop. For minor thermal burns, cool the burn. Hold the burned area under cold running water for at least five

minutes, or until the pain subsides. Body hypothermia must be avoided.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If irritation, blurred vision or swelling occurs and persists, obtain

medical advice from a specialist.

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First-aid measures after ingestion

: in case of ingestion, always assume that aspiration has occurred. The casualty should be sent immediately to hospital. Do not wait for symptoms to develop. Do not induce vomiting as there is high risk of aspiration. Do not give anything by mouth to an unconscious person.

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

Symptoms/effects after inhalation

: Inhalation of vapours may cause headache, nausea, vomiting and an altered state of consciousness.

Symptoms/effects after skin contact

: Symptoms: reddening, irritation.

Symptoms/effects after eye contact

: Slight eye irritation.

Symptoms/effects after ingestion

: Ingestion (swallowing) of this material may result in an altered state of consciousness and loss of coordination.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

: Foam (trained personnel only). Dry chemical powder. Carbon dioxide. Other inert gases (subject to regulations). Sand or earth.

Unsuitable extinguishing media

Do not use direct water jets on the burning product, they could cause splattering and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting

: In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Other information

: Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

: Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Work helmet. Antistatic non-skid safety shoes or boots. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection: a half or full-face respirator with filter(s) for organic vapours/H2S, or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

Emergency procedures

: Stop or contain leak at the source, if safe to do so. Avoid direct contact with released material. Stay upwind. In case of large spillages, alert occupants in downwind areas. Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages. The feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). If required, notify relevant authorities according to all applicable regulations. If necessary dike the product with dry earth, sand or similar non-combustible materials. Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use direct jets. When inside buildings or confined spaces, ensure adequate ventilation.

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6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent product from entering sewers, rivers or other bodies of water, or underground spaces (tunnels, cellars, etc.). Absorb spilled product with suitable non-combustible materials. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters, contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. Contain spillage - ventilate area and allow to evaporate. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.

6.3. Methods and material for containment and cleaning up

For containment

: Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Obtain special instructions before use. Ensure that all relevant regulations regarding explosive atmospheres, and handling and storage facilities of flammable products, are followed. Risk of explosive mixtures of vapour and air. Keep away from heat/sparks/open flames/hot surfaces. Do not eat, drink or smoke when using this product. Avoid contact with the hot product. Avoid release to the environment. Take precautionary measures against static electricity. Ground/bond containers, tanks and transfer/receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. The vapour is heavier than air. Beware of accumulation in pits and confined spaces. Use only bottom loading of tankers, in compliance with European legislation. Do not use compressed air for filling, discharging, or handling operations. Avoid contact with skin and eyes. Do not ingest. Do not breathe vapours. Use adequate personal protective equipment as required. For more information regarding protective equipment and operational conditions see Exposure scenarios. Ensure that proper housekeeping measures are in place. Keep away from food and beverages. Wash the hands thoroughly after handling. Change contaminated clothes at the end of working shift.

Handling temperature

10 - 50 °C

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content and flammability. Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability / explosion hazards. Open slowly in order to control possible pressure release. Empty containers may contain flammable product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

Storage conditions

Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.

Storage temperature

: 5-40°C

Information on mixed storage

: KEEP SUBSTANCE AWAY FROM: (strong) acids. (strong) bases. halogens. heat sources. oxidizing agents. peroxides.

Storage area

: Use and store only outdoors or in a well-ventilated area. Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Store separately from oxidising agents.

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Special rules on packaging

: If the product is supplied in containers: Keep only in the original container or in a suitable container for this kind of product. Keep containers tightly closed and properly labelled. Protect from the sunlight.

Packaging materials

: Recommended materials: For containers, or container linings use materials specifically approved for use with this product. some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

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

| ETBE (637-92-3) | | | |
|--|--|--|--|
| Slovakia - Occupational Exposure Limits | | | |
| NPHV (OEL TWA) [1] | 960 mg/m³ ethyl alcohol | | |
| NPHV (OEL TWA) [2] | 500 ppm ethyl alcohol | | |
| NPHV (OEL C) | 1920 mg/m³ ethyl alcohol | | |
| Ethanol (64-17-5) | | | |
| Hungary - Occupational Exposure Limits | | | |
| Local name | ETIL-ALKOHOL | | |
| AK (OEL TWA) | 1900 mg/m³ | | |
| CK (OEL STEL) | 3800 mg/m³ | | |
| Remark | N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok) | | |
| Regulatory reference | 5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről | | |
| tert-butyl methyl ether (1634-04-4) | tert-butyl methyl ether (1634-04-4) | | |
| EU - Indicative Occupational Exposure Limit (IOEL) | | | |
| Local name | Tertiary-butyl-methyl ether | | |
| IOEL TWA | 183.5 mg/m³ | | |
| IOEL TWA [ppm] | 50 ppm | | |
| IOEL STEL | 367 mg/m³ | | |
| IOEL STEL [ppm] | 100 ppm | | |
| Croatia - Occupational Exposure Limits | | | |
| GVI (OEL TWA) [1] | 183.5 mg/m³ | | |
| GVI (OEL TWA) [2] | 50 ppm | | |
| KGVI (OEL STEL) | 367 mg/m³ | | |
| KGVI (OEL STEL) [ppm] | 100 ppm | | |
| Hungary - Occupational Exposure Limits | | | |
| Local name | terc-BUTIL-METIL-ÉTER | | |
| AK (OEL TWA) | 183.5 mg/m³ | | |
| CK (OEL STEL) | 367 mg/m³ | | |

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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

| ETBE (637-92-3) | | |
|--|---------------------------|--|
| DNEL/DMEL (Workers) | | |
| Acute - systemic effects, inhalation | 2800 mg/m³ | |
| Long-term - systemic effects, dermal | 6767 mg/kg bodyweight/day | |
| Long-term - systemic effects, inhalation | 352 mg/m³ | |
| Long-term - local effects, inhalation | 105 mg/m³ | |
| DNEL/DMEL (General population) | | |
| Acute - systemic effects, inhalation | 1680 mg/m³ | |
| Long-term - systemic effects,oral | 12.5 mg/kg bodyweight/day | |
| Long-term - systemic effects, inhalation | 105 mg/m³ | |
| Long-term - systemic effects, dermal | 4060 mg/kg bodyweight/day | |
| Long-term - local effects, inhalation | 63 mg/m³ | |
| PNEC (Water) | | |
| PNEC aqua (freshwater) | 0.51 mg/l | |
| PNEC aqua (marine water) | 0.017 mg/l | |
| PNEC (Sediment) | | |
| PNEC sediment (freshwater) | 28.5 mg/kg dwt | |
| PNEC sediment (marine water) | 1.45 mg/kg dwt | |
| PNEC (Soil) | | |
| PNEC soil | 2.41 mg/kg dwt | |
| PNEC (STP) | | |
| PNEC sewage treatment plant | 12.5 mg/l | |

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Where hot product is handled in confined spaces, effective local ventilation must be provided.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

Personal protective equipment symbol(s):







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8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

normal antistatic working clothes are usually adequate

Hand protection:

Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.

8.2.2.3. Respiratory protection

Respiratory protection:

If necessary, approved respiratory protection equipment shall be used when handling hot product in confined spaces: enclosed face mask with cartridge/filter type "A" or self-contained breathing apparatus (SCBA).

8.2.2.4. Thermal hazards

Thermal hazard protection:

None in normal conditions.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Store finished products in closed containers (e.g, bulk tanks, drums, cans). All waste product is assumed to be collected and returned for reprocessing or use as a fuel. Carefully handle the substance to minimise releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless.

Odour : characteristic odour.
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available

Boiling point : $73 \,^{\circ}\text{C}$ Flash point : $-19 \,^{\circ}\text{C}$ Auto-ignition temperature : $375 \,^{\circ}\text{C}$

Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : 124 mm Hg at 25°C
Relative vapour density at 20°C : No data available

Relative density : 0.782

Solubility : Water: < 0.1 g/100ml

Partition coefficient n-octanol/water (Log Pow) : 1.28

Viscosity, kinematic : 1300000 mm²/s
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 1.23 – 7.7 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

This substance is stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

10.4. Conditions to avoid

They may be ignited by heat, sparks, static electricity or flames.

10.5. Incompatible materials

A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass.

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

| ETBE (637-92-3) | | |
|-------------------------------|--|--|
| LD50 oral rat | > 2000 mg/kg | |
| LD50 dermal rat | > 20 mg/kg | |
| LD50 dermal rabbit | > 2000 nl/kg | |
| Skin corrosion/irritation | : Not classified (Based on available data, the classification criteria are not met) | |
| Cariava ava damaga/irritation | · Not alongified (Passed on available data, the alongification criteria are not met) | |

| Not classified (Based on available data, the classification criteria are not met) |
|---|
| Not classified (Based on available data, the classification criteria are not met) |
| Not classified (Based on available data, the classification criteria are not met) |
| Not classified (Based on available data, the classification criteria are not met) |
| Not classified (Based on available data, the classification criteria are not met) |
| Classification according to VwVwS, Annex 3 |
| |

: Classification according to VwVwS, Annex 3 FTRF (637-92-3)

| | NOAEC (inhalation, rat, vapour) | 8400 – 16720 mg/l/4h |
|--|---------------------------------|---|
| | 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) | |
|----------------------|---|--|
| ETBE (637-92-3) | | |
| Viscosity, kinematic | 1300000 mm²/s | |

11.2 Information about other hazards

: No information on the properties of disruption of the endocrine system for human health is Other information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term

Hazardous to the aquatic environment, long-term (chronic)

: Not classified

: Not classified

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| ETBE (637-92-3) | |
|------------------------------------|--------------|
| LC50 - Fish [1] | > 1000 mg/l |
| EC50 - Crustacea [1] | > 974.1 mg/l |
| EC50 - Other aquatic organisms [1] | 868.5 mg/l |

12.2. Persistence and degradability

| ETBE (637-92-3) | |
|-------------------------------|---|
| Persistence and degradability | Product is biodegradable with difficulty. |
| BOD (% of ThOD) | Biodegradation is low OECD 301D =6,60% |

12.3. Bioaccumulative potential

| ETBE (637-92-3) | |
|---|------|
| Partition coefficient n-octanol/water (Log Pow) | 1.28 |

12.4. Mobility in soil

| ETBE (637-92-3) | |
|------------------|-----------------------|
| Mobility in soil | high mobility in soil |

12.5. Results of PBT and vPvB assessment

| ETBE (637-92-3) | |
|---------------------------|---------------------------------------|
| Results of PBT assessment | ETBE does not meet criteria substance |

12.6. Endocrine disturbing properties

No information on the properties of disruption of the endocrine system for human health is available.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

| 13.1. Waste treatment methods | |
|---------------------------------|---|
| Regional legislation (waste) | : 98/2001. (VI. 15.) Korm. rendelet a veszélyes hulladékkal kapcsolatos tevékenységek végzésének feltételeiről (Hungarian regulation). DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives. |
| Waste treatment methods | : Contain and dispose of waste according to local regulations. External recovery and recycling of waste should comply with applicable local and/or national regulations. External treatment and disposal of waste should comply with applicable local and/or national regulations. Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. |
| Sewage disposal recommendations | : Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Do not empty into drains; dispose of this material and its container in a safe way. |
| Waste disposal recommendations | Clear up spills immediately and dispose of waste safely. Dispose of waste or used sacks/containers according to local regulations. |
| Additional information | : (*) Hazardous waste according to Directive 91/689/EEC. European Waste Catalogue code(s) (Decision 2001/118/CE): The final user has the responsibility for the attribution of the most suitable code, according to the actual use(s) of the material, contaminations or alterations. |

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Ecology - waste materials

: hazardous waste. Avoid any discharge of the product into waste water. Disposal in high-temperature incinerator (> 1200 °C).

SECTION 14: Transport information

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

| ADR | RID | ADN | IMDG | IATA | |
|--|------------------------------------|------------------------------------|--|------------------------------------|--|
| 14.1. UN number | | | | | |
| 1179 | 1179 | 1179 | 1179 | 1179 | |
| 14.2. UN proper shipp | | | | | |
| ETHYL BUTYL ETHER | ETHYL BUTYL ETHER | ETHYL BUTYL ETHER | ETHYL BUTYL ETHER | ETHYL BUTYL ETHER | |
| 14.3. Transport hazard | | | | | |
| 3 | 3 | 3 | 3 | 3 | |
| 14.4. Packing group | | | | | |
| II | II | II | II | II | |
| 14.5. Environmental h | azards | | | | |
| Dangerous for the environment : No | Dangerous for the environment : No | Dangerous for the environment : No | Dangerous for the environment : No Marine pollutant : No | Dangerous for the environment : No | |
| 14.6. Special precaution | | | | | |
| F1 | F1 | F1 | | | |
| | | | | | |
| No supplementary information available | | | | | |

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

Not listed on the PIC list (Regulation EU 649/2012)

Not listed on the POP list (Regulation EU 2019/1021)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors) 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 |
|-------------|-------------------|---------|------------|------------|-----------|---------|
| Ethyl ether | Diethyl ether | 60-29-7 | 2909 11 00 | Category 3 | | Annex I |

15.1.2. National regulations

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

NV SR č. 355/2006 Z.z. o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci, v platnom znení

NV SR č. 356/2006 Z.z. a č. 301/2007 Z.z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci, v platnom znení

Vyhl. MŽP SR č. 371/2015 Z.z, ktoru sa vykonávajú niektoré ustanovenia zákona o odpadoch,

Vyhl. MŽP SR č. 365/2015 Z.z, ktorou sa ustanovuje katalóg odpadov, v platnom znení,

Zákon NR SR č. 79/2015 Z.z. o odpadoch a o zmene a doplnení niektorých zákonov, v platnom znení

Zákon NR SR č. 67/2010 Z.z. o podmienkach uvedenia chemických látok a chemických zmesí na trh a o zmene a doplnení niektorých zákonov (Chemický zákon)

| France | | |
|-----------------------|---|--|
| Occupational diseases | | |
| Code | Description | |
| RG 84 | Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide | |

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 7257)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen - Ontwikkeling : The substance is not listed

Denmark

Class for fire hazard : Class I-1 Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids

must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK) : LK 3 - Flammable liquids

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Data sources : FERC registration dossier.

Training advice : Before handling, storing or using the present substance for the first time, employees must

be informed.

| Full text of H- and EUH-statements: | | |
|-------------------------------------|--|--|
| Flam. Liq. 2 | Flammable liquids, Category 2 | |
| H225 | Highly flammable liquid and vapour. | |
| H336 | May cause drowsiness or dizziness. | |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Narcosis | |

SDS EU (REACH Annex II) MOL

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.