

Safety Data Sheet

Subject to Regulation (EC) No1907/2006 of the European Parliament and of the Council EC 1907/2006
as amended by Council Directive (EU) 2020/878

Version: 3.0 Revision date: 7.9.2022
Creation date in ENG: 22.9.2014 Replacement of version: 23.08.2022

DEXSO D.M.E.

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

Product name: **DEXSO D.M.E.**
Substance name: Dimethyl Ether
CAS No.: 115-10-6
EC No.: 204-065-8
Index. No.: 603-019-00-8
Registration number: 01-2119472128-37

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

Uses: Organic Degreaser for consumer use
Uses not recommended: Do not use near sources of ignition

1.3 Details of the supplier of the safety data sheet:

Dexo GmbH
Hardstrasse 1, 4133 Pratteln, Switzerland
Telephone: +41 79 193 49 30

1.3.1 A person qualified and responsible for safety data sheet in the Czech Republic:

jonas@dexo.com

1.4 Emergency telephone number in the Czech Republic:

Czech Republic: +420 602 414 051 or Poison centre Na Bojišti 1, 128 08 Praha2,
Phone nonstop 224 919 293, 224 915 402, or (only during the day 224 914 575)

England and Wales: NHS Direct - 0845 4647 or 111

Scotland: NHS 24 - 08454 24 24 24

*SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to EU Regulation no. 1272/2008

Aerosol 1 H222, H229
The full text of "H-phrases" is stated in Section 16 of this Safety Data Sheet.

2.1.2 The most serious adverse physico-chemical effects

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.
Build-up of explosive mixtures possible without sufficient ventilation.

2.1.3 The most serious adverse effects on human health

The substance is not classified as dangerous

2.1.4 The most serious adverse effects on the environment

The substance is not classified as dangerous

2.2 Label elements

2.2.1 The label elements in accordance with Regulation no. (EC) no. 1272/2008



DANGER

Dimethyl ether, Index no. 603-019-00-8
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
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.
P260 Do not breathe spray.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container to the municipal or sorted waste collection point.

2.3 Other hazards

The substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of EU Regulation 1907/2006.

2.4 Further information

Not to be used in a range of ignition sources.
Further information necessary to be added to the product label complying with other regulations, see Section 15.

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*SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substance

Hazardous substances:	Index No. EINECS. CAS No. Registration No.	Content (% ww)	Classification acc. (EC) No. 1272/2008
Dimethylether*	603-019-00-8 204-065-8 115-10-6 01-2119472128-37-xxxx	>99,9	Flam. Gas 1 H220 Press. Gas H280
Full text of H-phrases is described in Section 16 of this Safety Data Sheet			

* Substance with exposure limit, see SECTION 8

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

General information

In the case of health problems or if in doubt, seek medical advice and provide information from this safety data sheet. In case of unconsciousness place patient in recovery position and await ambulance.

In case of inhalation:

Stop exposure to vapours and relocate patient from exposure to the fresh air. . Ensure the patient is calm and rests, avoiding physical exertion. Avoid exposure to cold. In case of breathing difficulties seek medical help.

In case of eye contact:

Remove contact lenses if used. Immediately rinse eyes with clean and lukewarm running water for at least 15 min. Eyes should be wide open especially to rinse under eyes lids. Seek medical advice if the pain or eye redness persists.

In case of contact with skin:

Remove contaminated clothing, rinse contaminated skin with soap under running water. If there are signs of a strong irritation (redness of the contaminated skin) or skin damage, seek medical advice.

In case of ingestion:

Not anticipated. An aerosol spray.

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

Frostbite

4.3 Indication of any immediate medical attention and special treatment needed

In standard use immediate medical attention is not needed required only if the symptoms become more pronounced.

SECTION 5 FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

powder

Unsuitable extinguishing media:

Water in small quantities and a full water jet. Water can be used only for cooling products (containers) near the fire.

5.2 Special hazards arising from the substance or mixture:

Vapours may form explosive mixtures with air. Vapours may travel to areas away from work site before igniting/flashing back to vapour source.

The heat from fire increases inner pressure in containers and can cause their bursting or explosion. The exploding containers could fly up to the distance several ten meters.

5.3 Advice for fire fighters:

In case of fire, wear suitable protective equipment – respiratory/breathing apparatus.
Keep containers cool with water spray until well after the fire is out.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non - emergency personnel

No smoking. Do not inhale aerosols. Ensure effective ventilation. Due to the potential exposure to hazardous agents, wear suitable protective equipment (resistant gloves, protective glasses and clothing). Eliminate all sources of ignition. Switch off all electrical devices that can create sparks (Sections 7 and 8). Gas vapours are heavier than air. Do not allow vapours to drain.

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6.1.2 For emergency responders

No smoking. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Avoid draining into sewage/surface water/ground water.

6.3 Methods and material for containment and cleaning up

Evacuate area. Ventilate the area.

6.4 Reference to other sections

See sections 7, 8 and 13

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

For personal protection see section 8.

Avoid contact with skin and eyes. Do not inhale any gases/vapours/aerosols. Use only with adequate ventilation.

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release. Do not breathe spray. Protect your eyes. Pressurized container: May burst if heated. Protect from sunlight.

Do not expose to temperatures exceeding 50°C/122°F. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Use only as directed.

Advice on protection against fire and explosion: Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Vapours are heavier than air and may spread along floors.

Vapours may travel to areas away from work site before igniting/flashing back to vapour source.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool dry place. Keep away from heat sources. Avoid accumulation of static electricity. No smoking.

7.3 Specific end use(s)

not relevant

*SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Substances for which following concentration of occupational exposure limit values are set (COMMISSION DIRECTIVE 2000/39/EC as amended)

8.1.1

Chemical name	CAS Number	Eight hours	Short-term
dimethylether	115-10-6	1920	-

8.1.1

Arbeitsplatzgrenzwert (AGW) - DE

Chemical name	CAS Number	Eight hours	
dimethylether	115-10-6	1000 ml/m ³ 1900 mg/m ³	DE TRGD 900-

8.1.2 Biological limit values:

not prescribed

8.1.3 Values DNEL and PNEC

(MSDS of supplier):

DNEL/DMEL:

Workers, Inhalation, Long-term systemic effects: 1894 mg/m³

Consumers, Inhalation, Long-term systemic effects: 471 mg/m³

PNEC:

Fresh Water: 0.155 mg/l

Marine water: 0.016 mg/l

Intermittent water: 1.549 mg/l

Sewage treatment plant 160 mg/l,

Fresh water sediment 0.681 mg/kg

Marine sediment: 0.069 mg/kg

Soil: 0,045 mg/kg.

8.1.4 Exposure scenarios

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Relevant information from the Chemical Safety Reports of the registered substances contained is given in the body of the safety data sheet.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Effective exhaust ventilation system

8.2.2 Individual protection measures, such as personal protective equipment

The personal protective equipment used must comply with Regulation (EU) 2016/425 and Commission Directive (EU) 2019/1832).

8.2.2.1 A General hygienic and protective measures

While working with the product Do not eat, drink or smoke. Avoid contact with eyes and skin. When you stop working with the product wash your hands. Pregnant women should avoid inhalation and skin contact.

8.2.2.2 Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.3 Hand protection

safety gloves; EN 374.
Incompatible materials see point 10.5

8.2.2.4 Eye protection

Tightly fitting safety goggles.

8.2.2.5 Protecting skin (the whole body)

Protective work clothing; do not eat, drink or smoke while working;

8.2.3 Environmental exposure controls

Not necessary when used as required, avoid entering into surface waterways and sewers.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Physical state (at 20°C): system liquid-vapour in pressurized metal container
Colour	colourless
Odour	odourless
Odour Threshold	Not specified
Melting point/freezing point	-141 °C
Boiling point/boiling range	-24,8 °C
Flammability	extremely flammable aerosol
Lower and upper explosion limit	upper (%v/v): 26.2; lower (%v/v): 3.3
Flash point	Not applicable
Auto-ignition temperature	226 °C at 1 013 hPa (dimethylether)
Decomposition temperature	Not specified
pH	Not applicable
Kinematic viscosity	Not available
Solubility In water	In water: insoluble
In organic solvents	in fats (oil): soluble
Partition coefficient: n-octanol/water	log Pow: 0,07 at 25 °C

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Vapour pressure	5 100 hPa at 20 °C, 11 400 hPa at 50 °C
Density and/or relative density	670 kg/m ³ (20°C)
Relative vapour density	1,59
Particle characteristics (solids)	Not applicable
Evaporation rate	Not specified
Explosive properties	Not explosive
Oxidising properties	Not classified as oxidising

9.2 Other information

Not available

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

The product under standard conditions of use is stable and does not degrade.

10.2 Chemical stability

The product under standard conditions of use is stable and does not degrade.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

even short-time temperatures above 50°C, flames and sparks.

10.5 Incompatible materials

Hydrogen fluoride, Strong oxidizing agents, Oxygen, Rubber products, Viton (R)

10.6 Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

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. LD50 oral, rat (mg/kg): not applicable LD50 dermal, rat (mg/kg): not applicable LC50 inhalation, rat (mg/L): 309 (4 h)
Skin corrosion/ irritation:	Based on available data, the classification criteria are not met. May cause frostbite
Serious eye damage/irritation:	Based on available data, the classification criteria are not met.
Skin sensitisation/ Respiratory 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. Method: OECD Test Guideline 452, Species: rat , Application Route: Inhalation, Result: Animal testing did not show any effects on fertility
STOT-single exposure:	Based on available data, the classification criteria are not met.
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.

11.1.2 Further information

Repeated dose toxicity:
Species: rat , Application Route: inhalation (vapour), Exposure time: 2 years, NOEL: 47 mg/l, Method: OECD Test Guideline 452
Genotoxicity in vivo:
Ames test: negative, Method: OECD Guide-line 471 - Bacterial Reverse Mutation Test, In vitro cytogenetic test in human lymphocytes: negative Method: OECD Guide-line 473
Genotoxicity in vivo:
Species: Drosophila melanogaster, Method: OECD Test Guideline 477, negative
Reproductive toxicity/Development/Teratogenicity:
Target Organ Systemic Toxicant - Repeated exposure:
Method: OECD Test Guideline 414, Species: rat, Application Route: Inhalation
Species: rat , Application Route: inhalation (vapour), Exposure time: 2 years, NOEL: 47 mg/l, Method: OECD Test Guideline 452

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- 11.2 Information on likely routes of exposure:**
skin, eyes, ingestion, inhalation
- 11.3 Symptoms related to the physical, chemical and toxicological characteristics**
skin: May cause frostbite. May degrease the skin.
eyes: May cause irritation.
inhalation (big amount): May cause irritation of respiratory tract.
- 11.4 Further information:**
None

SECTION 12 ECOLOGICAL INFORMATION

- 12.1 Toxicity**
acute toxicity for aquatic organisms: (Information from MSDS od supplier)
LC5096h, fish (mg/L): >4,1
EC5048h, daphnia (mg/L): >4,4
EC50 96h, algae (mg/L): 154,9
EC10, bacteria (mg/L): >1600
- 12.2 Persistence and degradability**
Persistence: Not available
Degradability: Not readily biodegradable.
5 % - Method: OECD Guide-line 301 D - Ready Biodegradability: Closed Bottle Test
- 12.3 Bioaccumulative potential**
Bioaccumulation is unlikely
- 12.4 Mobility in soil**
Not relevant
- 12.5 Results of PBT and vPvB assessments**
Not classified as PBT or vPvB
- 12.6 Endocrine disrupting properties**
To our knowledge, it does not contain substances identified as endocrine disruptors
- 12.7 Other adverse effects**
Not available

SECTION 13 DISPOSAL CONSIDERATION

- 13.1 Waste treatment methods**
All Waste must be handled in accordance with national regulations.
Empty packaging dispose in a collection point for sorted wastes or municipal waste.
- 13.1.1 The potential risk in waste disposal.**
Pressurized container
- 13.1.2 Special precautions for recommended waste treatment options (only for disposal of a big amount of substance):**
Regarding to the flammability is necessary to dispose it in a well-ventilated area away from sources of ignition. No smoking.

*SECTION 14 TRANSPORT INFORMATION

14.1	UN number or ID number	UN 1950
14.2	UN proper shipping name	AEROSOLS
14.3	Transport hazard class (es)	2
14.4	Packing group	-
14.5	Environmental hazards	no
14.6	Special precautions for users	NOT APPLICABLE
14.7	Maritime transport in bulk according to IMO instruments	NOT APPLICABLE
14.8	Land transport ADR/RID	
	Class/classification code	2 (5F)
	Packing group:	-
	Safety label	2.1
	Description:	UN 1950 Aerosols, flammable
14.9	Maritime transport IMDG:	
	Class/classification code	2.1
	Packing group:	-

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Safety Label	2.1
Description:	UN 1950 Aerosols, flammable
Ems No.:	F-D,S-U
Marine pollutant	no

14.10

Air Transport ICAO/IATA-DGR

Class/classification code	2.1
Packing group:	-
Description:	UN 1950 Aerosols, flammable

*SECTION 15 REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Regulation (EC) No1907/2006 of the European Parliament and of the Council of 18. December 2006 on Registration, Evaluation, Authorization 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
The European Agreement Concerning the International carriage of dangerous goods by road (Agreement ADR)
NOTE: The stated regulatory information only indicate basic regulations described in this safety data sheet. Please note the possible existence of additional legislation complementing these regulations. Refer to all applicable national, international and local regulations and directives.
Water contaminating class (Germany): WGK 1 slightly water endangering
- 15.2 Chemical safety assessment**
A Chemical Safety Assessment has been carried out for this substance (Dimethyl Ether).

*SECTION 16 OTHER INFORMATION

- 16.1 Full text of H phrases**
H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.
- 16.2 Training instructions**
Workers who come into contact with dangerous substances must be acquainted by the employer to the extent necessary with the effects of these substances, with the ways of handling them, with protective measures, with first aid principles, with necessary remediation procedures and with procedures for liquidation of faults and accidents. . The legal entity or natural person handling this chemical substance must be trained in the safety rules and data given in the safety data sheet.
- 16.3 Information on sources of data used in the compilation of the Safety Data Sheet**
This Safety Data Sheet should be used in conjunction with the Material Data Sheet. The SDS does not replace the MDS. Information herein presented is based on our knowledge of the product at the time of issue and are presented in good faith. The user is alerted to the potential danger as resulting from the use of the product for purposes other than for which it is intended. This does not exempt the user from the understanding and implementation of all laws and regulations regulating their business. The implementation of all regulations required for handling the product is he sole responsibility of the user. These regulatory directives are intended to help the user in meeting their duties related to the handling of dangerous products. This information is not exhaustive. This does not exempt the user from their duty to make sure there are no other laws and regulations than those referred to herein, and relating to the use and storage of the product, this remaining solely the user's responsibility.
- 16.4 National Poison Centres**
<https://www.eapcct.org/index.php?page=links>
<https://poisoncentres.echa.europa.eu/cs/appointed-bodies>
<https://echa.europa.eu/cs/support/helpdesks>
- 16.5 Changes made to the previous version of the safety data sheet**
Significant changes made to sections marked with *