

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 27.12.2023

Version number 4 (replaces version 3)

Revision: 12.07.2023

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

- **1.1 Product identifier**
- **Trade name:** tert-butyl methyl ether
- **Chemical Identification:**  
 MTBE  
 2-methoxy-2-methylpropane  
 methyl t-butyl ether
- **Article number:** 1389
- **CAS Number:**  
 1634-04-4
- **EC number:**  
 216-653-1
- **Index number:**  
 603-181-00-X
- **Registration number** 01-2119452786-27-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
 Only for the use of professionals users
- **Life cycle stages IS** Use at industrial Sites
- **Sector of Use**  
 SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites  
 SU9 Manufacture of fine chemicals  
 SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
- **Product category** PC21 Laboratory chemicals
- **Process category**  
 PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.  
 PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions  
 PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition  
 PROC4 Chemical production where opportunity for exposure arises  
 PROC5 Mixing or blending in batch processes  
 PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities  
 PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities  
 PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)  
 PROC15 Use as laboratory reagent
- **Environmental release category**  
 ERC1 Manufacture of the substance  
 ERC2 Formulation into mixture  
 ERC6a Use of intermediate
- **Application of the substance / the mixture**  
 Chemical for research, development, manufacturing, laboratory chemical for analysis.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Biosolve Chimie  
 20 Rue Roger Husson, 57260 Dieuze, France  
 Tel: +33 3 878 675 80/81/82/83/84/85  
 Email: info@biosolvechimie.com

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Biosolve B.V.

Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.

Tel: +31-(0)40-2071300

Fax: +31-(0)40-2048537

Email: [info@biosolve-chemicals.com](mailto:info@biosolve-chemicals.com)

· **Further information obtainable from:** Product safety department.

· **1.4 Emergency telephone number:**

Contact list of appointed bodies for information relating to emergency health response, according to Art. 45(1) Reg. (EC) No 1272/2008.

See below section 16 or at <https://poisoncentres.echa.europa.eu/home>.

Help desk: <http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks>.

Data from: ECHA - EUROPEAN CHEMICALS AGENCY

For more information see section 16.

## SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**


GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms**


GHS02



GHS07

· **Signal word** Danger

· **Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

· **Precautionary statements**

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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- P240 Ground and bond container and receiving equipment.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
- CAS: 1634-04-4 tert-butyl methyl ether
- **Identification number(s)**
- **EC number:** 216-653-1
- **Index number:** 603-181-00-X

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
- No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
- No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
- CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

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### SECTION 6: Accidental release measures

#### · 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

#### · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

#### · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

#### · 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 Store in cool, dry place in tightly closed receptacles.

#### · Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

#### · 7.2 Conditions for safe storage, including any incompatibilities

##### · Storage:

· Requirements to be met by storerooms and receptacles: Store in a cool location.

· Information about storage in one common storage facility: Not required.

##### · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

#### · 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: 1634-04-4 tert-butyl methyl ether**

IOELV Short-term value: 367 mg/m<sup>3</sup>, 100 ppm

Long-term value: 183.5 mg/m<sup>3</sup>, 50 ppm

##### · DNELs

1634-04-4

Worker DNEL, acute Local effects inhalation 357 mg/m<sup>3</sup>

Worker DNEL, longterm Systemic effects inhalation 178.5 mg/m<sup>3</sup>

Worker DNEL, longterm Systemic effects dermal 5100 mg/kg Body weight

Consumer DNEL, acute Local effects inhalation 214 mg/m<sup>3</sup>

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Consumer DNEL, longterm Local effects inhalation 53.6 mg/m<sup>3</sup>

Consumer DNEL, longterm Systemic effects oral 7.1 mg/kg Body weight

Consumer DNEL, longterm Systemic effects dermal 3570 mg/kg Body weight

*Recommended monitoring procedures*
*Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.*

#### · PNECs

1634-04-4

PNEC Fresh water 5.1 mg/l

PNEC Marine water 0.26 mg/l

PNEC Fresh water sediment 23 mg/kg

PNEC Marine sediment 1.17 mg/kg

PNEC Sewage treatment plant 71 mg/l

PNEC Aquatic intermittent release 47.2 mg/l

PNEC Soil 1.62 mg/kg

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

#### · 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Filter AX (EN 371)

Use suitable respiratory protective device in case of insufficient ventilation.

· **Hand protection**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

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#### Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **As protection from splashes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

splash contact:

Glove material: Nitrile rubber

Glove thickness: 0.40 mm

Break through time: &gt; 120 min

- **Eye/face protection**

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



#### Tightly sealed goggles

- **Environmental exposure controls**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Risk of explosion.

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Physical state**

Fluid

- **Colour:**

Colourless

- **Odour:**

Characteristic

- **Odour threshold:**

No data available.

- **Melting point/freezing point:**

-108.6 °C

- **Boiling point or initial boiling point and boiling range**

55.2 °C

- **Flammability**

Highly flammable.

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· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	1.6 Vol %
· <b>Upper:</b>	8.4 Vol %
· <b>Flash point:</b>	-30 °C
· <b>Auto-ignition temperature:</b>	460 °C
· <b>Decomposition temperature:</b>	No data available
· <b>pH</b>	No data available
· <b>Viscosity:</b>	
· <b>Dynamic at 20 °C:</b>	0.27 mPas
· <b>Solubility</b>	
· <b>water at 25 °C:</b>	51 g/l
· <b>Partition coefficient n-octanol/water (log value)</b>	No data available
· <b>Vapour pressure at 20 °C:</b>	268 hPa
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	0.74 g/cm <sup>3</sup>
· <b>Relative density</b>	No data available
· <b>Vapour density</b>	No data available

· <b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	No data available
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Molecular weight</b>	88.15 g/mol
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	No data available

· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Highly flammable liquid and vapour.
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void

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- |  |                         |
|--|-------------------------|
| <ul style="list-style-type: none"> <li>· <b>Corrosive to metals</b></li> <li>· <b>Desensitised explosives</b></li> </ul> | <p>Void</p> <p>Void</p> |
|--|-------------------------|

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **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:**

Oral	LD50	4,000 mg/kg (rat)
Dermal	LD50	1,000 mg/kg (rabbit)
Inhalative	LC50/4 h	142 mg/l (rat)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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** 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.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

HP3 Flammable

HP4 Irritant - skin irritation and eye damage

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

UN2398

· **14.2 UN proper shipping name**

· **ADR**

UN2398 METHYL tert-BUTYL ETHER

· **IMDG, IATA**

METHYL tert-BUTYL ETHER

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

3 (F1) Flammable liquids.

· **Label**

3

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### · IMDG, IATA



- Class 3 Flammable liquids.
- Label 3

- 14.4 Packing group II
- ADR, IMDG, IATA

- 14.5 Environmental hazards:
- Marine pollutant: No

- 14.6 Special precautions for user Warning: Flammable liquids.
- Hazard identification number (Kemler code): 33
- EMS Number: F-E,S-D
- Stowage Category E

- 14.7 Maritime transport in bulk according to IMO instruments Not applicable.

### · Transport/Additional information:

- ADR
- Limited quantities (LQ) 1L
- Excepted quantities (EQ) Code: E2
- Maximum net quantity per inner packaging: 30 ml
- Maximum net quantity per outer packaging: 500 ml
- Transport category 2
- Tunnel restriction code D/E

- IMDG
- Limited quantities (LQ) 1L
- Excepted quantities (EQ) Code: E2
- Maximum net quantity per inner packaging: 30 ml
- Maximum net quantity per outer packaging: 500 ml

## SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40

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- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**  
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**  
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**  
Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has 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.

- **Department issuing SDS:** Product safety department

- **Contact:**

Austria German Vergiftungsinformationszentrale 01 406 43 43 <http://www.goeg.at/de/VIZ>

Belgium French Centre antipoison 070 245 245 <http://www.centreatipoisons.be>

Dutch Antigif centrum 070 245 245 <http://www.antigifcentrum.be>

German Gif tinformati onszentrum 070 245 245 <http://www.poisoncentre.be>

Bulgaria\* Bulgarian Токсикологични центрове 02 9154 411 <https://pirogov.eu/bg>

Croatia\* Croatian Centar za kontrolu otrovanja +385 1 2348 342 <https://www.imi.hr/en/jedinica/poison-control-centre>

Czech Rep Czech Toxikologické informační středisko +420 224 91 92 93; +420 224 91 54 02 <http://www.tis-cz.cz>

Denmark Danish Giftlinien +45 8212 1212 <https://www.bispebjerghospital.dk/giftlinien>

Estonia Estonian Mürgistusteabekeskus 16662; +372 7943 794 <https://www.16662.ee>

Finland Finnish Myrkytystietokeskus 0800 147 111; +358 9 471 977 <http://www.hus.fi/sairaanhoito/sairaanhoitopalvelut/myrkytystietokeskus/Sivut/default.aspx>

France French Angers +33 2 41 48 21 21 <http://www.centres-antipoison.net/angers/index.html>

Bordeaux +33 5 56 96 40 80 <http://www.centres-antipoison.net/bordeaux/index.html>

Lille +33 0800 59 59 59 <http://www.centres-antipoison.net/lille/index.html>

Lyon +33 4 72 11 69 11 <http://www.centres-antipoison.net/lyon/index.html>

Marseille +33 4 91 75 25 25 <http://www.centres-antipoison.net/marseille/index.html>

Nancy +33 3 83 22 50 50 <http://www.centres-antipoison.net/nancy/index.html>

Paris +33 1 40 05 48 48 <http://www.centres-antipoison.net/paris/index.html>

Strasbourg +33 3 88 37 37 37 <http://www.centres-antipoison.net/strasbourg/index.html>

Toulouse +33 5 61 77 74 47 <http://www.centres-antipoison.net/toulouse/index.html>

Germany German Berlin +49 30 19240 <https://giftnotruf.charite.de>

Bonn +49 228 19240 <http://www.gizbonn.de/index.php?id=272>

Erfurt +49 361 730730 <https://www.ggiz-erfurt.de/home.html>

Freiburg +49 761 19240 <https://www.uniklinik-freiburg.de/giftberatung.html>

Göttingen +49 551 19240 <https://www.giz-nord.de/cms/index.php>

Homburg/Saar +49 6841 19240 <http://www.uniklinikumsaarland.de/de/einrichtungen/>

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*informations\_und\_behandlungszentrum\_fuer\_vergiftungen\_des\_saarlandes*

Mainz +49 6131 19240 <http://www.giftinfo.uni-mainz.de/index.php?id=24807>

München +49 89 19240 <http://www.toxinfo.med.tum.de>

Greece Greek κέντρο δηλητηριάσεων +30 213 200 9000 <http://www.aglaiakyriakou.gr/>; <http://0317.syzefxis.gov.gr>

Hungary Hungarian Egészségügyi Toxikológiai Tájékoztató Szolgálat +36 6 80 20 11 99; +36 06 1 476 6464 <http://www.okbi.hu/page.php?trid=1&dz=103>

Italy Italian Bergamo +39 800 88 33 00 [http://www.asst-pg23.it/section/259/Tossicologia\\_-\\_Centro\\_antiveleni](http://www.asst-pg23.it/section/259/Tossicologia_-_Centro_antiveleni)

Firenze +39 55 794 78 19 <http://www.antiveleni.altervista.org>

Milano +39 2 661 01 029 <http://www.centroantiveleni.org>

Pavia +39 382 244 44 <http://www-3.unipv.it/reumatologia-tossicologia/cav>

Napoli +39 81 747 28 70

Foggia +39 881 732 326

Roma +39 6 685 93 726 / +39 6 499 78 000 / +39 6 305 43 43 <http://www.corso-primo-soccorso-roma.it/centri%20antiveleno-lazio.html>

Ireland English Poisons information Centre of Ireland +353 1 809 21 66 <http://www.poisons.ie/Public>

Latvia\* Latvian Saindēšanās informācijas centri +371 670 00 610 <https://www.aslimnica.lv/lv>

Russian Латвия +371 67000610 <https://www.aslimnica.lv/lv>

Lithuania Lithuanian Apsinuodijimų informacijos biuras + 370 5 236 20 52 <http://www.apsinuodijau.lt>

Luxembourg German Giftinformationszentrum +49 800 255 00 <http://www.poissoncentre.be>

French Centre antipoison +352 800 255 00 <http://www.centreantipoisons.be>

Netherlands Dutch 31 (0)88 755 8 <https://www.productnotificatie.nl>

Norway Norwegian Giftinformasjonen +47 22 59 13 00 <https://helsenorge.no/Giftinformasjon>

Poland Polish Kraków +48 12 411 99 99 <http://www.oit.cm.uj.edu.pl>

Gdansk +48 58 682 04 04 <http://www.pctox.pl/news.php>

Poznań +48 61 847 69 46 <http://www.raszeja.poznan.pl/oddzialy/oddzial%20toksykologiczny>

Warszawa +48 607 218 174 [okzit@burdapi.pol.pl](mailto:okzit@burdapi.pol.pl)

Portugal Portuguese Centro de Informação Antivenenos +351 808 250 143 <http://www.inem.pt>

Romania Romanian CNMRMC +40 213 183 606 [infotox@insp.gov.ro](mailto:infotox@insp.gov.ro)

Spitalul Clinic de Urgenta Bucuresti +40 215 992 300 int. 291  
[spital@urgentaflorasca.ro](mailto:spital@urgentaflorasca.ro)

Spitalul Clinic Judetean de Urgenta Targu Mures +40 265.212.111  
[secretariat@spitjudms.ro](mailto:secretariat@spitjudms.ro)

Russia Russian Горячая линия Министерства здравоохранения +7 495 628 4453; +7 495 627 2944  
<http://rospotrebnadzor.ru>

Serbia Serbian Nacionalni centar za kontrolu trovanja +381 11 3608 440 <http://www.vma.mod.gov.rs/sr-lat/specijalnosti/centri/nacionalni-centar-za-kontrolu-trovanja>

Slovak Rep Slovak Národné toxikologické informačné centrum +421 2 5477 4166 <http://www.ntic.sk>

Spain Spanish Servicio de Información Toxicológica +34 91 562 04 20 [https://www.administraciondejusticia.gob.es/paj/pub%20lico/ciudadano/informacion\\_institucional/organismos/instituto\\_nacional\\_de\\_toxicologia\\_y\\_ciencias\\_fo%20renses/servicios/info\\_toxicologica/que\\_es\\_sit%20ut/p/c5/04\\_SB8K8xLLM9MSSzPy8xBz9CP0os3g\\_AlcjCyD%20DRwMDUwNLA08nwzAvM0czA\\_8gM6B8pFm8mae%20r\\_qWdQsImJcaiLiYGncViYa4CHr4GBiQExuglwAEd%20CusNBrsWpwsLUACKPy3WuRvjlg83wy5sQ0G8C%20tR-P\\_w88nNT9QtYQyMMmj0zA9IvFQH18l4/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfTjBFMjhCMUEwMDUwOT%20BJQjFWSjZBNjBPTjA!/?itemId=45381](https://www.administraciondejusticia.gob.es/paj/pub%20lico/ciudadano/informacion_institucional/organismos/instituto_nacional_de_toxicologia_y_ciencias_fo%20renses/servicios/info_toxicologica/que_es_sit%20ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3g_AlcjCyD%20DRwMDUwNLA08nwzAvM0czA_8gM6B8pFm8mae%20r_qWdQsImJcaiLiYGncViYa4CHr4GBiQExuglwAEd%20CusNBrsWpwsLUACKPy3WuRvjlg83wy5sQ0G8C%20tR-P_w88nNT9QtYQyMMmj0zA9IvFQH18l4/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfTjBFMjhCMUEwMDUwOT%20BJQjFWSjZBNjBPTjA!/?itemId=45381)

Sweden Swedish Giftinformationscentralen +46 10 456 6700 <https://giftinformation.se>

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## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 27.12.2023

Version number 4 (replaces version 3)

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**Trade name: tert-butyl methyl ether**

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Switzerland German Giftinformationszentrum 145 <http://toxinfo.ch>

French Centre antipoison 145 <http://toxinfo.ch>

Italian Centro Antiveleni 145 <http://toxinfo.ch>

United Kingdom English NHS Helpline 111 NHS Helpline - England and Wales: <http://www.nhs.uk/NHSEngland/AboutNHSservices/Emergencyandurgentcareservices/Pages/NHS-111.aspx>

· **Date of previous version:** 19.10.2022

· **Version number of previous version:** 3

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

· **\* Data compared to the previous version altered.**

EU

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### **Annex: Exposure scenario**

- **Short title of the exposure scenario**
- **Sector of Use**
  - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
  - SU9 Manufacture of fine chemicals
  - SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
- **Product category** PC21 Laboratory chemicals
- **Process category**
  - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
  - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
  - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
  - PROC4 Chemical production where opportunity for exposure arises
  - PROC5 Mixing or blending in batch processes
  - PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
  - PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
  - PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
  - PROC15 Use as laboratory reagent
- **Environmental release category**
  - ERC1 Manufacture of the substance
  - ERC2 Formulation into mixture
  - ERC6a Use of intermediate
- **Notes** Do not use for private / domestic purposes (household).
- **Description of the activities / processes covered in the Exposure Scenario**  
See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
- **Duration and frequency** 5 workdays/week.
- **Physical parameters**
- **Physical state** Fluid
- **Concentration of the substance in the mixture** Raw material.
- **Other operational conditions**
- **Other operational conditions affecting worker exposure**  
Avoid contact with the skin.  
Take precautionary measures against static discharge.  
Keep away from sources of ignition - No smoking.
- **Other operational conditions affecting consumer exposure** Keep out of the reach of children.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
- **Worker protection**
- **Organisational protective measures** No special measures required.
- **Technical protective measures**  
Provide explosion-proof electrical equipment.  
Ensure that suitable extractors are available on processing machines

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· **Personal protective measures**

*Do not inhale gases / fumes / aerosols.*

*Avoid contact with the skin.*

*The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.*

*Protective gloves*

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

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

*Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.*

*Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.*

*For personal protection see section 8.*

· **Disposal measures** *Ensure that waste is collected and contained.*

· **Disposal procedures**

*Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

· **Waste type** *Partially emptied and uncleaned packaging*

· **Exposure estimation**

· **Consumer** *Not relevant for this Exposure Scenario.*

· **Guidance for downstream users** *No further relevant information available.*