

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

Printing date 30.07.2018

Revision: 07.07.2018

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

- **1.1 Product identifier**
- **Trade name:** Methanol, LC-MS
- **Article number:** ME0326
- **CAS Number:**
67-56-1
- **EC number:**
200-659-6
- **Index number:**
603-001-00-X
- **Registration number** 01-2119433307-44-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory reagent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Scharlab, S.L.
C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa
08181 Sentmenat (Barcelona) SPAIN
Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65
email: scharlab@scharlab.com
Internet Web Site: www.scharlab.com
- **Regional representation:**
Scharlab, S.L.
C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa
08181 Sentmenat (Barcelona) SPAIN
Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65
email: scharlab@scharlab.com
Internet Web Site: www.scharlab.com
- **Further information obtainable from:** technical department
- **1.4 Emergency telephone number:**
Please contact the regional Scharlab distributor/dealer in your country
During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

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.



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 3 H311 Toxic in contact with skin.
Acute Tox. 3 H331 Toxic if inhaled.

(Contd. on page 2)

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

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 1)



GHS08 health hazard

STOT SE 1 H370 Causes damage to organs.

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



GHS06



GHS08

Signal word Danger**Hazard statements**

H225 Highly flammable liquid and vapour.

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

H370 Causes damage to organs.

Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P405 Store locked up.

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 Chemical characterisation: Substances****CAS No. Description**

67-56-1 methanol

Identification number(s)**EC number:** 200-659-6**Index number:** 603-001-00-X**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation:

Supply fresh air or oxygen; call for doctor.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 2)

- 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. 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**
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:**
CO₂, 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:** Mouth respiratory protective device.

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:**
Dilute with plenty of water.
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).
Dispose contaminated material as waste according to item 13.
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**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 3)

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

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

67-56-1 methanol

WEL Short-term value: 333 mg/m³, 250 ppm

Long-term value: 266 mg/m³, 200 ppm

Sk

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

- **8.2 Exposure controls**

- **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.

Store protective clothing separately.

Avoid contact with the eyes and skin.

- **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

- **Material of gloves**

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.

- **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:

Fluid

(Contd. on page 5)

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

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 4)

Colour:	Colourless
• Odour:	Alcohol-like
• Odour threshold:	Not determined.
• pH-value:	Not determined.
• Change in condition	
Melting point/freezing point:	-98 °C
Initial boiling point and boiling range:	64.7 °C
• Flash point:	11 °C
• Flammability (solid, gas):	Not applicable.
• Ignition temperature:	455 °C
• Decomposition temperature:	Not determined.
• Auto-ignition temperature:	Not determined.
• Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
• Explosion limits:	
Lower:	5.5 Vol %
Upper:	44 Vol %
• Vapour pressure at 20 °C:	128 hPa
• Density at 20 °C:	0.79 g/cm ³
• Relative density	Not determined.
• Vapour density	Not determined.
• Evaporation rate	Not determined.
• Solubility in / Miscibility with water:	Fully miscible.
• Partition coefficient: n-octanol/water:	Not determined.
• Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
• 9.2 Other information	No further relevant information available.

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 toxicological effects**
- **Acute toxicity**
Toxic if swallowed, in contact with skin or if inhaled.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 5)

LD/LC50 values relevant for classification:

Oral LD50 5,628 mg/kg (rat)

Dermal LD50 15,800 mg/kg (rabbit)

Primary irritant effect:• **Skin corrosion/irritation** Based on available data, the classification criteria are not met.• **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.**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**• **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**

Causes damage to organs.

• **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.

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.**Additional ecological information:****General notes:**

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

12.5 Results of PBT and vPvB assessment• **PBT:** Not applicable.• **vPvB:** Not applicable.• **12.6 Other adverse effects** No further relevant information available.

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.

Uncleaned packaging:• **Recommendation:** Disposal must be made according to official regulations.• **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number• **ADR, IMDG, IATA**

UN1230

14.2 UN proper shipping name• **ADR**

1230 METHANOL

• **IMDG, IATA**

METHANOL

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 6)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 3 Flammable liquids.
 · **Label** 3+6.1

· **IMDG**



· **Class** 3 Flammable liquids.
 · **Label** 3/6.1

· **IATA**



· **Class** 3 Flammable liquids.
 · **Label** 3 (6.1)

· **14.4 Packing group**

· **ADR, IMDG, IATA** II

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user** Warning: Flammable liquids.

· **Danger code (Kemler):** 336

· **EMS Number:** 3-06

· **Stowage Category** B

· **Stowage Code** SW2 Clear of living quarters.

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 1L

· **Transport category** 2

· **Tunnel restriction code** D/E

· **UN "Model Regulation":** UN 1230 METHANOL, 3 (6.1), II

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 listed.

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 500 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 5,000 t

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40, 69

(Contd. on page 8)

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

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 7)

- **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.

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

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

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

- **Contact:** msds@scharlab.com

- **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)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport 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)

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

Acute Tox. 3: Acute toxicity – Category 3

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 8)

Annex: Exposure scenario 1

- **1 - Short title of the exposure scenario** Industrial use
- **Sector of Use**
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category** PROC15 Use as laboratory reagent
- **Environmental release category**
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
- **Description of the activities / processes covered in the Exposure Scenario**
See section 1 of the annex to the Safety Data Sheet.
- **2 - Conditions of use**
- **Duration and frequency**
4 hrs (half working shift).
Emission days (days/year): 240
- **Physical parameters**
- **Physical state** Fluid
- **Concentration of the substance in the mixture** Raw material.
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
Avoid contact with the skin.
Do not breathe gas/vapour/aerosol.
Take precautionary measures against static discharge.
Keep away from sources of ignition - No smoking.
- **Risk management measures**
Use in a ventilated with filtered air pressurized cabin. Effectiveness 90%
- **Worker protection**
- **Organisational protective measures**
Ensure good ventilation. This can be achieved by using a local exhaust or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.
- **Technical protective measures**
Provide explosion-proof electrical equipment.
Ensure that suitable extractors are available on processing machines
- **Personal protective measures**
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Detailed measures on hand protection according to Safety Data Sheet, section 8.
- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
- **Air** No special measures required.
- **Water** No special measures required.
- **Soil** No special measures required.
- **Notes** In case of unintended release of the product: See section 6 of the Safety Data Sheet.
- **Disposal measures**
Disposal must be made according to official regulations.
Ensure that waste is collected and contained.

(Contd. on page 10)

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

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 9)

• 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**• 3 - Exposure estimation**

To estimate exposures in the workplace has been used ECETOC TRA tool unless otherwise indicated.

• Worker (oral)

The calculated value is smaller than the DNEL.

Detailed information on the exposure estimation can be found at <http://www.ecetoc.org/tra>.

• Worker (dermal)

PROC 15: 0.34 (mg/kg/d)

Detailed information on the exposure estimation can be found at <http://www.ecetoc.org/tra>.

• Worker (inhalation)

PROC 15: 6.67 (mg/m³)

Detailed information on the exposure estimation can be found at <http://www.ecetoc.org/tra>.

• Environment

Detailed information on the estimation of the environmental exposure can be found at <http://ecb.jrc.ec.europa.eu/euses/>.

• 4 - Guidance for downstream users

Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.

Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.

For the risk assessment, the tools recommended by ECHA can be used.

(Contd. on page 11)

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

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 10)

Annex: Exposure scenario 2

- **1 - Short title of the exposure scenario** Laboratory use
- **Sector of Use**
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Process category** PROC15 Use as laboratory reagent
- **Environmental release category**
ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
- **Description of the activities / processes covered in the Exposure Scenario**
See section 1 of the annex to the Safety Data Sheet.
- **2 - Conditions of use**
- **Duration and frequency**
4 hrs (half working shift).
Emission days (days/year): 240
- **Physical parameters**
- **Physical state** Fluid
- **Concentration of the substance in the mixture** Raw material.
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
Avoid contact with the skin.
Do not breathe gas/vapour/aerosol.
Take precautionary measures against static discharge.
Keep away from sources of ignition - No smoking.
- **Risk management measures**
Use in a ventilated with filtered air pressurized cabin. Effectiveness 80%
- **Worker protection**
- **Organisational protective measures**
Ensure good ventilation. This can be achieved by using a local exhaust or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.
- **Technical protective measures**
Provide explosion-proof electrical equipment.
Ensure that suitable extractors are available on processing machines
- **Personal protective measures**
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Detailed measures on hand protection according to Safety Data Sheet, section 8.
- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
- **Air** No special measures required.
- **Water** No special measures required.
- **Soil** No special measures required.
- **Notes** In case of unintended release of the product: See section 6 of the Safety Data Sheet.
- **Disposal measures**
Disposal must be made according to official regulations.

(Contd. on page 12)

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

Printing date 30.07.2018

Revision: 07.07.2018

Trade name: Methanol, LC-MS

(Contd. of page 11)

- 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
 - **3 - Exposure estimation**
To estimate exposures in the workplace has been used ECETOC TRA tool unless otherwise indicated.
 - **Worker (oral)**
The calculated value is smaller than the DNEL.
Detailed information on the exposure estimation can be found at <http://www.ecetoc.org/tra>.
 - **Worker (dermal)**
PROC 15: 0.34 (mg/kg/d)
Detailed information on the exposure estimation can be found at <http://www.ecetoc.org/tra>.
 - **Worker (inhalation)**
PROC 15: 6.67 (mg/m³)
Detailed information on the exposure estimation can be found at <http://www.ecetoc.org/tra>.
 - **Environment**
Detailed information on the estimation of the environmental exposure can be found at <http://ecb.jrc.ec.europa.eu/euses/>.
 - **4 - Guidance for downstream users**
Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
For the risk assessment, the tools recommended by ECHA can be used.