

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

Page 1/11

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

- **1.1 Product identifier**
- **Trade name:** methanol
- **Article number:** 1091
- **CAS Number:**  
67-56-1
- **EC number:**  
200-659-6
- **Index number:**  
603-001-00-X
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
PANREAC QUIMICA S.L.U.  
C/Garraf 2  
Polígono Pla de la Bruguera  
E-08211 Castellar del Vallès (Barcelona)  
Tel. (+34) 937 489 400  
Fax. (+34) 937 489 401  
e-mail: [product.safety@itwreagents.com](mailto:product.safety@itwreagents.com)
- **Further information obtainable from:** email: [product.safety@panreac.com](mailto:product.safety@panreac.com)
- **1.4 Emergency telephone number:**  
Single telephone number for emergency calls: 112 (EU)  
Tel.: (+34) 937 489 499

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Flam. Liq. 2 H225 Highly flammable liquid and vapour.  
Acute Tox. 3 H301 Toxic if swallowed.  
Acute Tox. 3 H311 Toxic in contact with skin.  
Acute Tox. 3 H331 Toxic if inhaled.  
STOT SE 1 H370 Causes damage to the central nervous system and the visual organs.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)

GB

Trade name: methanol

(Contd. of page 1)

· **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 the central nervous system and the visual organs.

· **Precautionary statements**

- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
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 [or 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 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.  
Involve doctor immediately.

· **After inhalation:**

If breathing stops: mouth-to-mouth respiration or mechanical ventilation, oxygen mask if necessary.  
Immediately call a physician.  
Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.  
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

(Contd. on page 3)

Trade name: methanol

(Contd. of page 2)

- **After skin contact:**  
Call a doctor immediately.  
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.  
Make victim drink ethanol (e.g. 1 drink glass off a 40 % alcoholic beverage).
- **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**  
Mentioning methanol ingestion.

## 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**  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide  
Combustible.  
Forms explosive mixtures with air at ambient temperatures.  
Formaldehyde  
Vapours are heavier than air and may spread along floors.  
Beware of backfiring.  
Forms explosive mixtures with air on intense heating.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Mouth respiratory protective device.  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information**  
Cool endangered receptacles with water spray.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Contain escaping vapours with water.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Keep away from ignition sources.  
Avoid substance contact.  
Do not inhale steams/aerosols.
- **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 section 13.  
Ensure adequate ventilation.  
Clean up affected area.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.

(Contd. on page 4)

**Trade name: methanol**

(Contd. of page 3)

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**  
Keep receptacles tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.  
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
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:** Away from sources of ignition and heat.
- **Further information about storage conditions:**  
This product is hygroscopic.  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.  
Open receptacle only under localised extractor facilities.  
Store receptacle in a well ventilated area.  
Store only outside or in explosion proof rooms.  
Store under lock and key and with access restricted to technical experts or their assistants only.  
Accessible for authorised persons only.
- **Recommended storage temperature:** Room Temperature
- **Storage class:** 3
- **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:

##### **67-56-1 methanol**

WEL	Short-term value: 333 mg/m <sup>3</sup> , 250 ppm
Sk	Long-term value: 266 mg/m <sup>3</sup> , 200 ppm

#### · DNELs

Oral	Acute - systemic effects, general population	5 mg/kg
	Long-term - systemic effects, general population	5 mg/kg
Dermal	Acute - systemic effects, worker	20 mg/kg
	Long-term - systemic effects, worker	20 mg/kg
	Acute - systemic effects, general population	5 mg/kg
	Long term - systemic effects, general population	5 mg/kg
Inhalative	Acute - local effects, worker	130 mg/m <sup>3</sup>

(Contd. on page 5)

**Trade name: methanol**

(Contd. of page 4)

Acute - systemic effects, worker	130 mg/m3
Long-term - systemic effects, worker	130 mg/m3
Long-term - local effects, worker	130 mg/m3
Acute - systemic effects, general population	26 mg/m3
Acute - local effects, general population	26 mg/m3
Long-term - systemic effects, general population	26 mg/m3
Long-term - local effects, general population	26 mg/m3

• **PNECs**

Aquatic compartment - freshwater	20.8 mg/L
Aquatic compartment - marine water	2.08 mg/L
Aquatic compartment - water, intermittent releases	1,540 mg/L
Aquatic compartment - sediment in freshwater	77 mg/kg
Terrestrial compartment - soil	100 mg/kg
Sewage treatment plant	100 mg/L

• **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.

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.

Use suitable respiratory protective device only when aerosol or mist is formed.

• **Recommended filter device for short term use:** Filter AX

• **Hand protection**



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**

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.

• **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber, BR

Recommended thickness of the material:  $\geq 0.7$  mm

Value for the permeation: Level  $\geq 480$  min

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

Fluorocarbon rubber (Viton)

Recommended thickness of the material:  $\geq 0.7$  mm

Value for the permeation: Level  $\geq 120$  min

(Contd. on page 6)

Trade name: methanol

(Contd. of page 5)

· **Eye/face protection**

Face protection



Tightly sealed goggles

· **Body protection:**

Solvent resistant protective clothing

Use protective suit.

Full head, face and neck protection

Flame retardant antistatic protective clothing

## SECTION 9: Physical and chemical properties

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

· **General Information**

· **Physical state**

Fluid

· **Colour:**

Colourless

· **Odour:**

Alcohol-like

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

-98 °C

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

64.7 °C

· **Flammability**

Not applicable.

Highly flammable.

· **Lower and upper explosion limit**

· **Lower:**

5.5 Vol %

· **Upper:**

44 Vol %

· **Flash point:**

10 °C

· **Auto-ignition temperature:**

455 °C

· **Decomposition temperature:**

Not determined.

· **pH**

Neutral

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **Dynamic at 20 °C:**

0.597 mPas

· **Solubility**

· **water:**

Fully miscible.

· **Partition coefficient n-octanol/water (log value)**

-0.77211

· **Vapour pressure at 20 °C:**

128 hPa

· **Density and/or relative density**

· **Density at 20 °C:**

0.792 g/cm<sup>3</sup>

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **9.2 Other information**

· **Appearance:**

· **Form:**

Fluid

· **Important information on protection of health and environment, and on safety.**

· **Ignition temperature:**

Not determined.

· **Explosive properties:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

(Contd. on page 7)

Trade name: methanol

(Contd. of page 6)

- |                       |                 |
|-----------------------|-----------------|
| · Solvent content:    |                 |
| · VOC (EC)            | 100 %           |
| · Molecular weight    | 32 g/mol        |
| · Change in condition |                 |
| · Evaporation rate    | Not determined. |
- 
- |   |                                     |
|---|-------------------------------------|
| · Information with regard to physical hazard classes                        |                                     |
| · Explosives  | Void                                |
| · Flammable gases   | Void                                |
| · Aerosols  | Void                                |
| · Oxidising gases   | Void                                |
| · Gases under pressure  | Void                                |
| · Flammable liquids   | Highly flammable liquid and vapour. |
| · Flammable solids  | Void                                |
| · Self-reactive substances and mixtures                                     | Void                                |
| · Pyrophoric liquids  | Void                                |
| · Pyrophoric solids   | Void                                |
| · Self-heating substances and mixtures                                      | Void                                |
| · Substances and mixtures, which emit flammable gases in contact with water | Void                                |
| · Oxidising liquids   | Void                                |
| · Oxidising solids  | Void                                |
| · Organic peroxides   | Void                                |
| · Corrosive to metals   | Void                                |
| · Desensitised explosives   | Void                                |

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
Visible decomposition with spontaneous ignition on heating.
- **10.3 Possibility of hazardous reactions**  
Reacts with oxidising agents.  
Danger of explosion.  
Forms explosive gas mixture with air.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**  
Various plastics  
oxidizing agent
- **10.6 Hazardous decomposition products:** In the event of fire: See chapter 5
- **Additional information:** hygroscopic

## SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Toxic if swallowed, in contact with skin or if inhaled.
- **LD/LC50 values relevant for classification:**  
Quantitative data on the toxicological effect of this product are not available.

(Contd. on page 8)

Trade name: methanol

(Contd. of page 7)

Components	Type	Value	Species
Oral	LD50	100 mg/kg (rat)	
Dermal	LD50	300 mg/kg (rabbit)	
Inhalative	LC50/4 h	3 mg/l (rat)	
<ul style="list-style-type: none"> <li>· <b>Serious eye damage/irritation</b></li> <li>· <b>After inhalation:</b> No irritant effect.</li> </ul>			
<ul style="list-style-type: none"> <li>· <b>Reproductive toxicity</b></li> </ul>			
NOAEL (Fertility)	0.13 mg/kg bw/day (rat)		
<ul style="list-style-type: none"> <li>· <b>STOT-single exposure</b> Causes damage to the central nervous system and the visual organs.</li> <li>· <b>Additional toxicological information:</b></li> </ul>			
<ul style="list-style-type: none"> <li>· <b>Repeated dose toxicity</b></li> </ul>			
Inhalative	NOAEL	1.06 mg/l (rat)	
<ul style="list-style-type: none"> <li>· <b>11.2 Information on other hazards</b></li> <li>· <b>Endocrine disrupting properties</b> Substance is not listed.</li> </ul>			

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

Type of test	Effective concentration	Method	Assessment
EC50/48 h	>10,000 mg/l (daphnia magna)		
EC50/96 h	12,000 mg/l (Crustacea)		
LC50/96 h	15,400 mg/l (fish)		

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** -0.77 log Pow
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **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:**  
Do not allow product to reach ground water, water course or sewage system.  
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water  
Danger to drinking water if even small quantities leak into the ground.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Chemicals must be disposed of in compliance with the respective national regulations.  
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.

(Contd. on page 9)



Trade name: methanol

(Contd. of page 8)

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

## SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, IMDG, IATA

UN1230

· 14.2 UN proper shipping name

· ADR, IMDG, IATA

METHANOL

· 14.3 Transport hazard class(es)

· ADR



· Class

3 (FT1) 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:

Not applicable.

· 14.6 Special precautions for user

Warning: Flammable liquids.

· Hazard identification number (Kemler code):

336

· EMS Number:

F-E,S-D

· Stowage Category

B

· Stowage Code

SW2 Clear of living quarters.

· 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

(Contd. on page 10)

Trade name: methanol

(Contd. of page 9)

· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	D/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	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
- **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.

- **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 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)  
VOC: Volatile Organic Compounds (USA, EU)  
DNEL: Derived No-Effect Level (UK REACH)  
PNEC: Predicted No-Effect Concentration (UK 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  
Acute Tox. 3: Acute toxicity – Category 3  
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1
- **\* Data compared to the previous version altered.**

## Annex: Exposure scenario

- **Short title of the exposure scenario** Formulation and packing/repacking of substances and mixtures
- **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

(Contd. on page 11)

Trade name: methanol

(Contd. of page 10)

- **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.
- **Other operational conditions affecting consumer exposure** No special measures required.
- **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
- **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.  
Use suitable respiratory protective device only when aerosol or mist is formed.  
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
- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
- **Water** No special measures required.
- **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.