

## Safety Data Sheet

### Methanol

Version 2.7

Revision Date: 09/01/2019

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** : Methanol

#### Recommended use of the chemical and restrictions on use

**Recommended use** : Solvent.  
Fuel  
Feedstock

#### Manufacturer or supplier's details

**Company** : Univar Solutions USA, Inc.  
**Address** : 3075 Highland Pkwy Suite 200  
Downers Grove, IL 60515  
United States of America (USA)

#### Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)  
CHEMTREC INTERNATIONAL Tel # 703-527-3887

**Additional Information:** : Responsible Party: Product Compliance Department  
E-mail: SDSNA@univarsolutions.com  
SDS Requests: 1-855-429-2661  
Website: www.univarsolutions.com

#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS Classification

Flammable liquids : Category 2

Acute toxicity (Oral) : Category 3

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Dermal) : Category 3

Eye irritation : Category 2A

Specific target organ toxicity - single exposure : Category 1 (Eyes, Central nervous system)

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

##### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.

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H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H370 Causes damage to organs.

#### Precautionary statements

##### : **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ eye protection/ face protection.

##### **Response:**

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician.  
P337 + P313 If eye irritation persists: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

##### **Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

##### **Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

#### Other hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Substance

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#### Hazardous components

| CAS-No. | Chemical name | Weight percent |
|---------|---------------|----------------|
| 67-56-1 | Methanol      | 90 - 100       |

Any Concentration shown as a range is due to batch variation.

#### SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
Take victim immediately to hospital.  
Do not induce vomiting without medical advice.

#### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon oxides  
formaldehyde  
toxic fumes
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
For safety reasons in case of fire, cans should be stored separately in closed containments.  
Use a water spray to cool fully closed containers.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Use personal protective equipment.

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#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
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.

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.  
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Advice on safe handling : Avoid formation of aerosol.  
Do not breathe vapours/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Container may be opened only under exhaust ventilation hood.  
Open drum carefully as content may be under pressure.  
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : No smoking.

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Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Components with workplace control parameters

| CAS-No. | Components | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis     |
|---------|------------|-------------------------------|--|-----------|
| 67-56-1 | Methanol   | TWA                           | 200 ppm  | ACGIH     |
|         |            | STEL                          | 250 ppm  | ACGIH     |
|         |            | TWA                           | 200 ppm<br>260 mg/m <sup>3</sup>               | NIOSH REL |
|         |            | ST                            | 250 ppm<br>325 mg/m <sup>3</sup>               | NIOSH REL |
|         |            | TWA                           | 200 ppm<br>260 mg/m <sup>3</sup>               | OSHA Z-1  |
|         |            | STEL                          | 250 ppm<br>325 mg/m <sup>3</sup>               | OSHA P0   |
|         |            | TWA                           | 200 ppm<br>260 mg/m <sup>3</sup>               | OSHA P0   |

##### Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

##### Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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Hygiene measures : Avoid contact with skin, eyes and clothing.  
When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and immediately after handling the product.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : Clear, Colorless

Odour : alcohol-like

Odour Threshold : 4.2 - 5960 ppm

pH : No data available

Freezing Point (Melting point/freezing point) : -97.8 - -97.6 °C (-144.0 - -143.7 °F)

Boiling Point (Boiling point/boiling range) : 64.7 °C (148.5 °F)

Flash point : 11 °C (52 °F)

Evaporation rate : 4.1  
(Butyl Acetate = 1)

Flammability (solid, gas) : No data available

Upper explosion limit : 36.5 %(V)

Lower explosion limit : 5.5 %(V)

Vapour pressure : 96.00 mmHg

Relative vapour density : 1.1 @ 20 °C (68 °F)  
(Air = 1.0)

Relative density : 0.791 - 0.793 @ 20 °C (68 °F)  
Reference substance: (water = 1)

Density : 0.792 g/cm<sup>3</sup> @ 20 °C (68 °F)

Solubility(ies)  
Water solubility : completely miscible

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : log Pow: 0.82

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|                           |                             |
|---------------------------|-----------------------------|
| Auto-ignition temperature | : 464 °C                    |
| Thermal decomposition     | : No data available         |
| Viscosity                 |                             |
| Viscosity, dynamic        | : 0.8 mPa.s @ 25 °C (77 °F) |

#### SECTION 10. STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Reactivity                         | : No dangerous reaction known under conditions of normal use.                            |
| Chemical stability                 | : Stable under normal conditions.  |
| Possibility of hazardous reactions | : Vapours may form explosive mixture with air.   |
| Conditions to avoid                | : Keep away from heat, flame, sparks and other ignition sources.<br>Exposure to moisture |
| Incompatible materials             | : Acids<br>Alkali metals<br>Alkalis<br>Oxidizing agents<br>Reducing agents               |
| Hazardous decomposition products   | : Carbon oxides<br>Formaldehyde  |

#### SECTION 11. TOXICOLOGICAL INFORMATION

##### Acute toxicity

###### Product:

|                           |   |
|---------------------------|---|
| Acute oral toxicity       | : Acute toxicity estimate: 101.01 mg/kg   |
| Acute inhalation toxicity | : Acute toxicity estimate: 3.03 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour |
| Acute dermal toxicity     | : Acute toxicity estimate: 303.03 mg/kg   |

###### Components:

###### **67-56-1:**

|                     |  |
|---------------------|--|
| Acute oral toxicity | : Assessment: The component/mixture is toxic after single ingestion. |
|---------------------|--|

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Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.  
Remarks: Supporting toxicological evidence is limited for this classification. This harmonized classification will replace the indicated classification due to industry leaders and the EU Harmonized Classification (Annex VII).

Acute dermal toxicity : Assessment: The component/mixture is toxic after single contact with skin.

#### Carcinogenicity

##### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

##### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### STOT - single exposure

##### Components:

##### 67-56-1:

Target Organs: Eyes, Central nervous system

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

#### Further information

##### Product:

Remarks: Solvents may degrease the skin.

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## SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

No data available

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available



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#### Other adverse effects

##### Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.  
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-909-4897

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

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### SECTION 14. TRANSPORT INFORMATION

#### DOT (Department of Transportation):

UN1230, Methanol, 3, II

#### IATA (International Air Transport Association):

UN1230, Methanol, 3 (6.1), II

#### IMDG (International Maritime Dangerous Goods):

UN1230, METHANOL, 3, (6.1), II, Flash Point:11 °C(52 °F)

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### SECTION 15. REGULATORY INFORMATION

WHMIS Classification : B2: Flammable liquid  
D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

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| Components | CAS-No. | Component RQ<br>(lbs) | Calculated product RQ<br>(lbs) |
|------------|---------|-----------------------|--------------------------------|
| Methanol   | 67-56-1 | 5000                  | 5000                           |

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)  
 Acute toxicity (any route of exposure)  
 Specific target organ toxicity (single or repeated exposure)  
 Serious eye damage or eye irritation

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

67-56-1                      Methanol

### Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

67-56-1                      Methanol

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

67-56-1                      Methanol

### Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307


### Massachusetts Right To Know

67-56-1                      Methanol

### Pennsylvania Right To Know

67-56-1                      Methanol

### California Prop 65

 **WARNING:** This product can expose you to chemicals including Methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

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NZIoC : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

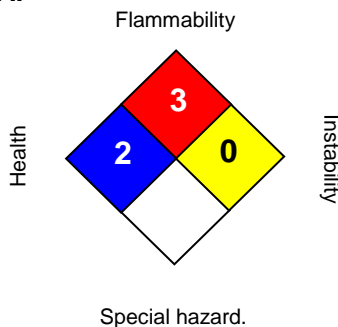
KECI : On the inventory, or in compliance with the inventory

PHIL : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

#### NFPA:



#### HMIS III:

|                        |          |
|------------------------|----------|
| <b>HEALTH</b>          | <b>2</b> |
| <b>FLAMMABILITY</b>    | <b>3</b> |
| <b>PHYSICAL HAZARD</b> | <b>0</b> |

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) [SDSNA@univarsolutions.com](mailto:SDSNA@univarsolutions.com).

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**Legacy SDS:** : R0001447; 100000027675

#### Material number:

16141257, 16142280, 16134421, 16141541, 16127437, 16125772, 16121925, 145658, 16039562, 16110171, 16108079, 16002900, 16087724, 559683, 16032613, 779915, 16024445, 16018469, 736115, 730007, 730006, 717897, 716726, 713298, 710534, 695309, 694361, 689940, 690224, 682513, 638917, 625491, 602665, 554053, 554376, 554361, 554308, 554052, 554159, 546854, 117978, 132227, 118306, 116867, 161021, 130207, 130736, 159527, 160328, 115098, 115229, 143136, 508297, 501342, 20302, 22243, 20300, 20299, 500031, 16100717, 16076584, 16056428, 16056427, 16056426, 16056425, 16055184, 16053934, 16049742, 16031073, 16024444, 16021152, 16016316, 743459, 699273, 627702, 600798, 546132, 504381, 504224, 161018, 160329, 159524, 144602, 136311, 131538,

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131334, 122681, 117981, 115232, 82470, 82339, 20305, 20304, 20303, 20301, 20298, 20297

| Key or legend to abbreviations and acronyms used in the safety data sheet |  |       |  |
|---|--|-------|--|
| ACGIH   | American Conference of Government Industrial Hygienists  | LD50  | Lethal Dose 50%  |
| AICS  | Australia, Inventory of Chemical Substances              | LOAEL | Lowest Observed Adverse Effect Level   |
| DSL   | Canada, Domestic Substances List                         | NFPA  | National Fire Protection Agency  |
| NDSL  | Canada, Non-Domestic Substances List                     | NIOSH | National Institute for Occupational Safety & Health                                  |
| CNS   | Central Nervous System                                   | NTP   | National Toxicology Program  |
| CAS   | Chemical Abstract Service                                | NZIoC | New Zealand Inventory of Chemicals   |
| EC50  | Effective Concentration                                  | NOAEL | No Observable Adverse Effect Level   |
| EC50  | Effective Concentration 50%                              | NOEC  | No Observed Effect Concentration   |
| EGEST   | EOSCA Generic Exposure Scenario Tool                     | OSHA  | Occupational Safety & Health Administration  |
| EOSCA   | European Oilfield Specialty Chemicals Association        | PEL   | Permissible Exposure Limit   |
| EINECS  | European Inventory of Existing Chemical Substances       | PICCS | Philippines Inventory of Commercial Chemical Substances                              |
| MAK   | Germany Maximum Concentration Values                     | PRNT  | Presumed Not Toxic   |
| GHS   | Globally Harmonized System                               | RCRA  | Resource Conservation Recovery Act   |
| >=  | Greater Than or Equal To                                 | STEL  | Short-term Exposure Limit  |
| IC50  | Inhibition Concentration 50%                             | SARA  | Superfund Amendments and Reauthorization Act.  |
| IARC  | International Agency for Research on Cancer              | TLV   | Threshold Limit Value  |
| IECSC   | Inventory of Existing Chemical Substances in China       | TWA   | Time Weighted Average  |
| ENCS  | Japan, Inventory of Existing and New Chemical Substances | TSCA  | Toxic Substance Control Act  |
| KECI  | Korea, Existing Chemical Inventory                       | UVCB  | Unknown or Variable Composition, Complex Reaction Products, and Biological Materials |
| <=  | Less Than or Equal To                                    | WHMIS | Workplace Hazardous Materials Information System                                     |
| LC50  | Lethal Concentration 50%                                 |       |  |