

## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: METHANOL

CAS Number: 67-56-1

**1. IDENTIFICATION:**

**Product Code** : 90028, 90029, 90030, 90098, 90188, 90461, 90604, 90680, 90460, 90607, 90704, 90719, 90724, 93509, 94046, 94104, 96511, 97216, 98105, 98607, 98701, 99503, 999004, 13352

**Company Name** : ADVENT CHEMBIO PRIVATE LIMITED

**Address** : W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, NAVI MUMBAI - 400 701.

**E-mail** : [sales@adventchembio.com](mailto:sales@adventchembio.com)

**WEBSITE** : [www.adventchembio.com](http://www.adventchembio.com)

**Company Phone Number** : 022-27690837

**2. HAZARDS IDENTIFICATION:****Hazard classification****Physical hazards**

**Flammable liquids** : Category 2

**Health hazards**

**Acute Toxicity(Oral)** : Category 3

**Acute toxicity (Dermal)** : Category 3

**Acute toxicity (Inhalation - vapor)** : Category 3

**Skin corrosion/irritation** : Category 2

**Serious eye damage/eye irritation** : Category 2

**Toxic to reproduction** : Category 2

**Specific target organ toxicity - single exposure** : Category 1

**Labels elements**

**Hazard symbol** :



**Signal word** :

Danger

**Hazard statement**

Toxic in contact with skin.  
Toxic if inhaled.  
Toxic if swallowed.  
Highly flammable liquid and vapor.  
Causes skin irritation.  
Causes serious eye irritation.  
Suspected of damaging fertility or the unborn child.  
Causes damage to organs.



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: METHANOL

CAS Number: 67-56-1

Precautionary statement

- Prevention** : Obtain special instructions before use.  
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.  
Keep container tightly closed. Ground/ bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
Use only non-sparking tools. Take precautionary measures against static discharge.
- Response** : IF exposed or concerned: Get medical advice/ attention.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Storage** : Store in a dry & well-ventilated place. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Disposal** : Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Other hazards which do not result in GHS classification** : Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. COMPOSITION/ INFORMATION ON INGREDIENTS:

Ingredient	CAS Number	Percent	Hazardous
Methanol	67-56-1	99 - 100%	Yes

4. FIRST AID MEASURES:

- General information** : Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
- Ingestion** : Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.  
Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen.
- Inhalation** : Get medical attention if symptoms persist.
- Skin contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
- Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
- Most important symptoms/effects, acute and delayed** : Toxic if inhaled. Toxic if swallowed. Toxic in contact with skin. Irritating to eyes, respiratory system and skin.
- Indication of immediate** : Symptoms may be delayed. Treat symptomatically.



## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: METHANOL

CAS Number: 67-56-1

medical attention and  
special treatment needed

**5. FIRE FIGHTING MEASURES:**

**General information** : Flammable liquid and vapor.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media** : Water spray, foam, dry powder or carbon dioxide.

**Unsuitable extinguishing media** : Avoid water in straight hose stream; will scatter and spread fire.

**Specific hazards arising from the chemical** : Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Vapor from the solvent may accumulate in container headspace resulting in flammability hazard. Heat may cause the containers to explode.

**Special protective equipment and precautions for firefighters**

**Special firefighting procedures** : Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. ACCIDENTAL RELEASE MEASURES:**

**Personal precautions, protective equipment and emergency procedures** : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up** : Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions** : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. HANDLING AND STORAGE:**

**Precautions for safe handling** : Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye

Protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

**Conditions for safe storage,** : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed and



## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: METHANOL

CAS Number: 67-56-1

**including any incompatibilities**

Store in a dry, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

**8. EXPOSURE CONTROLS PERSONAL PROTECTION:****Control parameters****Occupational exposure limits**

Chemical identity	Type	Exposure Limit values	Source
METHANOL	TWA	200 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	250 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	250 ppm 325 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	200 ppm 260 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	200 ppm 260 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	200 ppm 260 mg/m <sup>3</sup>	US. OSHA Table Z-1-A(29 CFR 1910.1000) (1989)
	STEL	250 ppm 325 mg/m <sup>3</sup>	US. OSHA Table Z-1-A(29 CFR 1910.1000) (1989)

**Appropriate engineering**

**controls** : No data available

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

<b>General information</b>	:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.
<b>Eye/face protection</b>	:	Wear safety glasses with side shields (or goggles).
<b>Hand protection</b>	:	Chemical resistant gloves.
<b>Other</b>	:	Wear suitable protective clothing.
<b>Respiratory protection</b>	:	In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapor cartridge.
<b>Hygiene measures</b>	:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower. Avoid contact with eyes, skin, and clothing.

**MATERIAL SAFETY DATA SHEET**

Version :01

**PRODUCT NAME: METHANOL**

CAS Number: 67-56-1

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

<b>Appearance</b>	: Clear, colorless liquid
<b>Odor</b>	: Characteristic
<b>Solubility</b>	: Miscible in water.
<b>Molecular Formula</b>	: CH <sub>4</sub> O
<b>Molecular Weight</b>	: 32.04 g/mol
<b>Specific Gravity</b>	: 0.791 g/mL at 25 °C
<b>pH</b>	: No data available.
<b>% Volatiles by volume @ 21C (70F)</b>	: 100
<b>Boiling Point</b>	: 64.7 °C
<b>Melting Point</b>	: -98.0 °C
<b>Flash Point</b>	: 9.7 °C
<b>Vapor Density (Air=1)</b>	: 1.11
<b>Vapor Pressure (mm Hg)</b>	: 16.9 kPa at 25 °C
<b>Evaporation Rate (BuAc=1)</b>	: 6.3

**10. STABILITY AND REACTIVITY:**

<b>Reactivity</b>	: No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	: Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	: Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	: Heat, sparks, flames.
<b>Incompatible materials</b>	: Strong oxidizing agents.
<b>Hazardous decomposition products</b>	: Thermal decomposition may release carbon oxides.

**11. TOXICOLOGICAL INFORMATION:**

**Information on likely routes of exposure**

<b>Ingestion</b>	: Irritating. May cause nausea, stomach pain and vomiting.
<b>Inhalation</b>	: May cause irritation to the mucous membranes and upper respiratory tract. May cause central nervous system effects
<b>Skin contact</b>	: Causes mild skin irritation

## MATERIAL SAFETY DATA SHEET

**PRODUCT NAME: METHANOL**

CAS Number: 67-56-1

**Eye contact** : Causes serious eye irritation.**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)****Oral Product** : LD 50 (Rat): 5,628 mg/kg  
LD 50 (Rabbit): 14,400 mg/kg**Dermal Product** : LD 50 (Rabbit): 15,800 mg/kg**Inhalation Product** : LC 50 (Rat, 6 h): 87.5 mg/l**Repeated dose toxicity Product** : In serious cases absorption in the body may lead to damage to the eyesight.**Skin corrosion/irritation Product** : Prolonged or repeated skin contact may cause drying, cracking, or irritation**Serious eye damage/eye irritation Product** : Irritating to eyes.**Respiratory or skin sensitization Product** : Not a skin sensitizer.**Carcinogenicity Product** : This substance has no evidence of carcinogenic properties**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans** : No carcinogenic components identified.**US. National Toxicology Program (NTP) Report on Carcinogens** : No carcinogenic components identified.**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050 Germ cell mutagenicity** : No carcinogenic components identified.**In vitro Product** : No mutagenic components identified.**Reproductive toxicity Product** : Suspected of damaging fertility or the unborn child.**Specific target organ toxicity - single exposure Product** : Central nervous system. Eyes.**Specific target organ toxicity - repeated exposure Product** : No data available.**Aspiration hazard Product** : May be harmful if swallowed and enters airways.**Other effects** : No data available.

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: METHANOL

CAS Number: 67-56-1

**12. ECOLOGICAL INFORMATION:****Ecotoxicity****Acute hazards to the aquatic environment :****Fish Product** : LC 50 (Fathead minnow (Pimephales promelas), 96 h): > 100 mg/l**Aquatic invertebrates Product** : EC 50 (Water flea (Daphnia magna), 48 h): > 10,000 mg/l**Chronic hazards to the aquatic environment :****Fish Product** : No data available.**Aquatic invertebrates Product** : No data available.**Toxicity to Aquatic Plants Product:** : No data available.**Persistence and degradability****Biodegradation Product** : Expected to be readily biodegradable.**BOD/COD ratio Product** : No data available.**Bioaccumulative potential****Bioconcentration factor (BCF) Product** : May accumulate in soil and water systems.**Partition coefficient n-octanol / water (log Kow) Product** : No data available.**Specified substance(s)** : Log Kow: -0.77**Mobility in soil** : No data available.**Other adverse effects** : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.**13. DISPOSAL CONSIDERATION:****Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws.**Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: METHANOL

CAS Number: 67-56-1

14. TRANSPORT INFORMATION:

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	UN 1230	Methanol	3(6.1)	II	No
IMDG	UN 1230	Methanol	3(6.1)	II	No
IATA	UN 1230	Methanol	3(6.1)	II	No

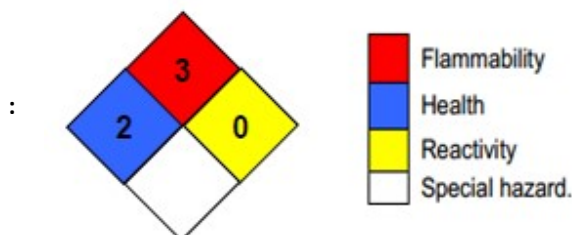
15. REGULATORY INFORMATION:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture  
No Data Available.

16. OTHER INFORMATION:

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date : 07/06/2023

Version : 01

**Disclaimer: This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. ADVENT CHEMBIO PRIVATE LIMITED makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the technical instructor in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of ADVENT CHEMBIO PRIVATE LIMITED and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).**