## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** **Methanol (Technical)**

**SYNONYMS:** Methanol laboratory grade, methanol, methyl alcohol

**CATALOG CODES:** VMT
**MANUFACTURER:** Volu-Sol
**ADDRESS:** 5095 West 2100 South
Salt Lake City, UT 84120

**EMERGENCY PHONE:** (800) 535-5053
**OTHER CALLS:** (801) 974-9474
**FAX:** (801) 974-9553

**CHEMICAL FAMILY:** -
**CHEMICAL FORMULA:** -
**PREPARED BY:** Volu-Sol

**RECOMMENDED USE:** Laboratory chemical

**RESTRICTIONS ON USE:** Use as recommended

## SECTION 2: HAZARD(S) IDENTIFICATION

**EMERGENCY OVERVIEW:**

**GHS Classification:**

| | |
|---|---|
| Flammable Liquids | (Category 2) |
| Acute Toxicity, Oral | (Category 3) |
| Acute Toxicity, Inhalation | (Category 3) |
| Acute Toxicity, Dermal | (Category 3) |
| Specific target organ toxicity Single Exposure | (Category 1) |

**GHS LABEL ELEMENTS:**

**Pictogram:**



**Signal Word:** Danger

**Hazard Statement(s):**

| | |
|---|---|
| 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 Statement(s):**

| | |
|---|---|
| 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 |
| P301+P310+P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower |
| P304+P340+P311 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician |
| P307+P311 | IF exposed: Call a POISON CENTER or doctor/ physician |
| P363 | Wash contaminated clothing before reuse |
| P370+P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction |
| 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 |
| P501 | Dispose of contents/container to an approved waste disposal plant |

**OTHER HAZARDS:** -

**HMIS Classification:**

| | |
|---|---|
| **Health hazard:** | 2 |
| **Chronic health hazard:** | - |
| **Flammability:** | 3 |
| **Physical hazards:** | 0 |

**NFPA Rating:**

| | |
|---|---|
| **Health hazard:** | 2 |
| **Fire:** | 3 |
| **Reactivity Hazard:** | 0 |

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT | CAS NO.<br>EC-NO.<br>Index-NO. |
|---|---|
| Methanol (>99%) | 67-56-1<br>200-659-6<br>603-001-00-X |

## SECTION 4: FIRST AID MEASURES

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

**SKIN:** Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes, wash before reuse. Consult a physician

**EYE:** Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician

## SECTION 5: FIRE-FIGHTING MEASURES

**FLAMMABLE LIMITS IN AIR:** **Percentage by Volume**
Upper: -%
Lower: -%

**FLASH POINT:** -

**AUTOIGNITION TEMPERATURE:** -

**EXTINGUISHING MEDIA:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus for firefighting if necessary

**FIRE AND EXPLOSION HAZARDS:** Use water spray to cool unopened containers

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Wear respiratory protection. 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. Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations

## SECTION 7: HANDLING AND STORAGE

**HANDLING AND STORAGE:** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition. 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. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product. Take measures to prevent the buildup of electrostatic charge. No smoking

**INCOMPATIBILITES:** Acid chlorides, acid anhydrides, oxidizing agents

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**EXPOSURE LIMITS:** Reported in a time-weighted average (TWA)

| Component | CAS-No. | Reference | OSHA | | ACGIH | |
|---|---|---|---|---|---|---|
| | | | ppm | mg/m³ | ppm | mg/m³ |
| Methanol | 67-56-1 | | 200 PEL | 260 PEL | 200 TLV | 260 TLV |

**VENTILATION SYSTEM:** Local and/or general exhaust is recommended to keep exposure below limits. Local exhaust ventilation is preferred for control of the emissions at its source, preventing dispersion into the general work area. Please refer to the ACGIH document, *Industrial Ventilation: A Manual of Recommended Practices*, for details

**PERSONAL RESPIRATORS:** If exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapour respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier; whichever is lowest. A full-face piece organic vapour respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face, positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres

**SKIN PROTECTION:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Use proper glove removal technique to avoid skin contact with this product. Wash and dry hands
**EYE PROTECTION:** Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** liquid
**ODOR:** Alcohol-like
**SOLUBILITY:** Miscible with water
**pH:** -
**BOILING POINT:** -
**MELTING POINT:** -
**VAPOR PRESSURE:** -
**SPECIFIC GRAVITY:** -
**MOLECULAR WEIGHT:** -
**DENSITY:** -
**VISCOSITY:** -
**REFRACTIVE INDEX:** -

## SECTION 10: STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under recommended conditions of use and storage

**CONDITIONS TO AVOID:** Heat, flames, ignition sources

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** No data available

## SECTION 11: TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION:**

**Acute Toxicity:** Oral human LDLO: 143 mg/kg
**Remarks:** lungs, thorax, or respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea
Oral rat LD50: 1,187-2,769 mg/kg
Inhalation rat LC50: 4 h – 128.2 mg/l
Inhalation rat LC50: 6 h – 87.6 mg/l
Dermal rabbit LD50: 17,100 mg/kg

**Skin/Eye Irritation:** No data available

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

**ROUTES OF ENTRY:** Inhalation/Ingestion/Skin

## SECTION 12: ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION:**

| | | | |
|---|---|---|---|
| **Toxicity:** | Fish | LC50 Mortality (bluegill) | 15,400.0 mg/l-96 h |
| | Oryzia latipes | NOEC | 7,900 mg/l-200 h |
| | Water flea | EC50 | >10,000 mg/l-48 h |
| | Algae | EC50 Growth Inhibition | 22,000 mg/l-96 h |

**Persistence and degradability:**

| | |
|---|---|
| Biodegradability | Aerobic – Exposure time 5 d<br>Result: 72% - rapidly biodegradable |
| BOD | 600-1,120 mg/g |
| COD | 1,420 mg/g |
| Theoretical $O_2$ Demand | 1,500 mg/g |

**Mobility in soil:** No data available
**PBT/vPvB Results:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in an RCRA approved waste facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements. Dispose of as unused product

## SECTION 14: TRANSPORT INFORMATION

| US DOT | IATA | TDG | IMDG/IMO |
|---|---|---|---|
| Shipping Name: Methanol | Shipping Name: Methanol | Shipping Name: Methanol | Shipping Name: Methanol |
| Hazard Class: 3 | Hazard Class: 3 (6.1) | Hazard Class: 3 (6.1) | Hazard Class: 3 (6.1) |
| UN Number: 1230 | UN Number: 1230 | UN Number: 1230 | UN Number: 1230 |
| Packing Group: II | Packing Group: II | Packing Group: II | Packing Group: II |

## SECTION 15: REGULATORY INFORMATION

| | |
|---|---|
| **SARA 302** | - |
| **SARA 313** | 67-56-1 |
| **SARA 311/312 Hazards** | Fire hazard, Acute Health Hazard, Chronic Health Hazard |
| **State** | Right to know lists:<br>MA: 67-56-1<br>PA: 67-56-1<br>NJ: 67-56-1<br>California Prop. 65 Components: 67-56-1 |

## SECTION 16: OTHER INFORMATION

**Disclaimer:** The information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control 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 the product.