COLUMBUS CHEMICAL INDUSTRIES

# Safety Data Sheet

# Methyl Alcohol HPLC/Trace

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Methyl Alcohol HPLC/Trace

**Synonyms/Generic Names:** Methanol

**Product Number:** 3499

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

**For More Information:** 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

## 2. HAZARDS IDENTIFICATION

**Hazard Not Otherwise Classified (HNOC):** None

**Target Organs:** Eyes, Kidney, Liver, Heart, Central nervous system

**Signal Words:** Danger

**Pictograms:**

**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, including precautionary statements:**

**Hazard Statements:**

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|---|---|
| H225 | Highly flammable liquid and vapor. |
| H301+H311+H331 | Toxic if swallowed, in contact with skin or if inhaled. |
| H370 | Causes damage to organs. |

**Precautionary Statements:**

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|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| 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/vapors/spray. |
| P264 | Wash hands 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/protective clothing/eye protection/face protection. |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P308+P311 | IF exposed or concerned: Call a POISON CENTER/doctor/physician. |
| P330 | Rinse mouth. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P370+P378 | In case of fire: Use dry chemical, carbon dioxide or alcohol-resistant foam to extinguish. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local regulations. |

**Potential Health Effects**

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| **Eyes** | Causes irritation. |
| **Inhalation** | May be harmful if inhaled. Causes respiratory tract irritation |
| **Skin** | Toxic if absorbed through skin. Causes skin irritation. |
| **Ingestion** | Toxic if swallowed. |

**NFPA Ratings**

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|---|---|
| **Health** | 1 |
| **Flammability** | 3 |
| **Reactivity** | 0 |
| **Specific hazard** | Not Available |

**HMIS Ratings**

| | |
|---|---|
| **Health** | 2 |
| **Fire** | 3 |
| **Reactivity** | 0 |

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | Weight % | CAS # | EINECS# / ELINCS# | Formula | Molecular Weight |
|---|---|---|---|---|---|
| Methyl Alcohol | >99 | 67-56-1 | 200-659-6 | $CH_3OH$ | 32.04 g/mol |

## 4. FIRST- AID MEASURES

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| **Eyes** | Rinse with plenty of water for at least 15 minutes and seek medical attention. |
| **Inhalation** | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. |
| **Skin** | Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention. |
| **Ingestion** | **Do Not Induce Vomiting!** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention. |

## 5. FIREFIGHTING MEASURES

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| **Suitable (and unsuitable) extinguishing media** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. Use carbon dioxide, alcohol-type foam or dry chemical. Containers may explode in a fire. Cool containers from a distance using water spray. |
| **Special protective equipment and precautions for firefighters** | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. |
| **Specific hazards arising from the chemical** | Containers may rupture in the heat of the fire. Do not use direct stream, as it may spread the fire. Emits toxic fumes (carbon oxides) under fire conditions. Vapors may collect in low areas. (See also Stability and Reactivity section.) |

## 6. ACCIDENTAL RELEASE MEASURES

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| **Personal precautions, protective equipment and emergency procedures** | See section 8 for recommendations on the use of personal protective equipment. |
| **Environmental precautions** | Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements. |
| **Methods and materials for containment and cleaning up** | Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. |

## 7. HANDLING AND STORAGE

**Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

**Conditions for safe storage, including any incompatibilities**
Store in a cool, dry, well ventilated area in tightly-closed, plainly-labeled containers. Do not store with acids, acid chlorides, acid anhydrides, oxidizing agents, alkali metals, reducing agents. Keep away from incompatible materials (see section 10 for incompatibilities).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational exposure controls:** Ventilation and appropriate grounding of containers

| Component | Exposure Limits | Basis | Entity |
|---|---|---|---|
| Methyl Alcohol | 200 ppm<br>262 mg/m$^3$ | TLV | ACGIH |
| | 250 ppm<br>328 mg/m$^3$ | STEL | ACGIH |
| | 200 ppm<br>260 mg/m$^3$ | PEL | OSHA |

| | | | |
|---|---|---|---|
| | 200 ppm<br>260 mg/m$^3$ | REL | NIOSH |
| | 250 ppm<br>325 mg/m$^3$ | STEL | NIOSH |

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

**Personal Protection**

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|---|---|
| **Eyes** | Wear chemical safety glasses or goggles, and face shield. |
| **Inhalation** | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator. |
| **Skin** | Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| **Other** | Not Available |

**Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|---|
| Appearance (physical state, color, etc.) | Clear, colorless liquid |
| Odor | Mild alcohol |
| Odor threshold | Not Available |
| pH | Not Available |
| Melting point/freezing point | -98°C (-144°F) |
| Initial boiling point and boiling range | 65°C (143°F) |
| Flash point | 12°C (54°F) Closed cup |
| Evaporation rate | 2.0 |
| Flammability (solid, gas) | Flammable |
| Upper/lower flammability or explosive limit | LFL: 6.0% UFL:36.0% |
| Vapor pressure | (@ 20°C) 96 mmHg |
| Vapor density | (air=1) 1.11 |
| Relative density | (@25°C) .9560 g/cm$^3$ |
| Solubility (ies) | Completely soluble in water |
| Partition coefficient: n-octanol/water | Low Pow: -0.77 |
| Auto-ignition temperature | 455°C (725°F) |
| Decomposition temperature | Not Available |

## 10. STABILITY AND REACTIVITY

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|---|---|
| **Chemical Stability** | Stable |
| **Possibility of Hazardous Reactions** | Will not occur. |
| **Conditions to Avoid** | Keep away from heat, flame and sparks. |
| **Incompatible Materials** | Do not store with strong oxidizing agents, strong acids, peroxides, aldehydes, halogens, ammonia, acid anhydrides or alkali metals. |
| **Hazardous Decomposition Products** | Carbon oxides. |

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

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| **Skin** | LD50 Dermal- rabbit- 15,800 mg/kg |
| **Eyes** | Eyes- rabbit- Eye irritation- 24 hour |
| **Respiratory** | $LC_{50}$ rat- 85 mg/L, 4 hours<br>$LC_{50}$ rat- 64000 ppm, 4 hours |
| **Ingestion** | $LD_{50}$ rat- 5,628 mg/kg |

**Carcinogenicity**

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|---|---|
| **IARC** | No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| **ACGIH** | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| **NTP** | No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| **OSHA** | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Signs & Symptoms of Exposure**

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| **Skin** | Burning, itching, redness may be harmful if absorbed through skin. |
| **Eyes** | Causes irritation. Redness, excessive blinking and watering eyes. |
| **Respiratory** | Coughing, wheezing, headache, disorientation, blurred vision, dizziness, fatigue or nausea. |
| **Ingestion** | Nausea, vomiting, may cause blindness and central nervous system depression. |

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|---|---|
| **Chronic Toxicity** | Ingestion may cause blindness |
| **Teratogenicity** | Damage to fetus not classifiable. |
| **Mutagenicity** | Does not cause mutation in mammalian somatic cells.<br>-Genotoxicity in vitro - Ames test - S. typhimurium - with and without metabolic activation – negative<br>-Genotoxicity in vitro - in vitro assay - fibroblast – negative<br>-Genotoxicity in vivo - mouse - male and female - Intraperitoneal - negative |
| **Embryotoxicity** | Pre-and Post- implant mortality |
| **Target Organ(s)** | Eyes, Kidney, Liver, Heart, Central nervous system |
| **Reproductive Toxicity** | Fertility classification not possible from current data. |
| **Respiratory/Skin Sensitization** | Does not cause skin sensitization.<br>-Maximization Test - guinea pig - OECD Test Guideline 406- Does not cause skin sensitization. |

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

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| **Aquatic Vertebrate** | Do not release directly into surface water<br>$LC_{50}$= 15,400 mg/L, 96 hours (Lepomis Macrochirus)<br>LC50- Oncorhynchus mykiss (rainbow trout)- 19,000 mg/l- 96 h<br>LC50- Cyprinus carpio (Carp)- 36,000.00 mg/l- 48 h |
| **Aquatic Invertebrate** | EC50- Daphnia magna (Water flea)- 24,500.00 mg/l- 48 h<br>EC100- Daphnia magna (Water flea)- 10,000.00 mg/l- 24 h |
| **Terrestrial** | Not Available |

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|---|---|
| **Persistence and Degradability** | Not Available |
| **Bioaccumulative Potential** | BCF of 1 |
| **Mobility in Soil** | Not Available |
| **PBT and vPvB Assessment** | Not Available |

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|---|---|
| **Other Adverse Effects** | Biochemical Oxygen Demand (BOD): 600 - 1,120 mg/g<br>Chemical Oxygen Demand (COD): 1,420 mg/g |

## 13. DISPOSAL CONSIDERATIONS

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| **Waste Product or Residues** | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue. |
| **Product Containers** | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container. |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## 14. TRANSPORTATION INFORMATION

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| US DOT | UN1230, Methanol, 3, pg II |
| TDG | UN1230, METHANOL, 3, PG II |
| IMDG | UN1230, METHANOL, 3, PG II |
| Marine Pollutant | No |
| IATA/ICAO | UN1230, Methanol, 3 pg II |

## 15. REGULATORY INFORMATION

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| TSCA Inventory Status | All ingredients are listed on the TSCA Active inventory. |
| DSL / NDSL | All ingredients are listed on the DSL inventory. |
| California Proposition 65 | Listed: Methyl Alcohol |
| Rhode Island: Hazardous Substance List | Listed: Methyl Alcohol |
| Massachusetts: Toxic or Hazardous Substance List, Right to Know | Listed: Methyl Alcohol |
| Pennsylvania: Hazardous Substance List | Listed: Methyl Alcohol |
| New Jersey: Right to Know Hazardous Substance List | Listed: Methyl Alcohol |
| SARA 302 | Not Listed |
| SARA 304 | Not Listed |
| SARA 311 | Fire Hazard, Acute Health Hazard, Chronic Health Hazard. |
| SARA 312 | Fire Hazard, Acute Health Hazard, Chronic Health Hazard. |
| SARA 313 | Listed: Methyl Alcohol |
| WHMIS Canada | Class B2: Flammable and combustible material – Flammable liquid.<br>Class D1B: Poisonous and infectious material – Immediate and serious effects – Toxic.<br>Class D2A: Poisonous and infectious material – Other effects – Very toxic.<br>Class D2B: Poisonous and infectious material – Other effects – Toxic. |

## 16. OTHER INFORMATION

| Revision | Date |
|---|---|
| Original | 06/27/2017 |
| Revision 1 | 08/28/2018 |
| Revision 2 | 04/11/2022 |