

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 30-Aug-2023

Revision Number 1

1. Identification

Product identifier

Product Name Methanol 5% in Dichloromethane

Other means of identification

Product Code(s) 3485

UN number or ID number UN2810

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended use Industrial use
Laboratory use
Industrial Manufacturing (all)

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI 53925 USA
Phone: (920) 623-2140
Fax: (920) 623-2577
www.columbuschemical.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 for US / 703-527-3887 outside US

Emergency Telephone 911

2. Hazard(s) identification

Classification

| | |
|--|-------------|
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Dermal | Category 4 |
| Carcinogenicity | Category 1B |
| Specific target organ toxicity (single exposure) | Category 1 |
| Flammable liquids | Category 4 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements**Danger****Hazard statements**

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H350 - May cause cancer

H370 - Causes damage to organs

H227 - Combustible liquid.

**Precautionary Statements - Prevention**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Precautionary Statements - Response

P321 - Specific treatment (see First-Aid Measures on SDS)

P307 + P311 - IF exposed: Call a POISON CENTER or doctor

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P312 - Call a POISON CENTER or doctor if you feel unwell

P362 - Take off contaminated clothing and wash before reuse

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P370 + P378 - In case of fire: Use CO₂, dry chemical, or foam to extinguish**Precautionary Statements - Storage**

P405 - Store locked up

P403 + P235 - Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

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

Other information

May be harmful if inhaled.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% | Formula | Molecular Weight |
|-----------------|---------|----------|---------------------------------|------------------|
| Dichloromethane | 75-09-2 | 95 | CH ₂ Cl ₂ | 84.93 g/mol |

| | | | | |
|----------|---------|---|--------------------|-------------|
| Methanol | 67-56-1 | 5 | CH ₃ OH | 32.04 g/mol |
|----------|---------|---|--------------------|-------------|

4. First-aid measures

Description of first aid measures

| | |
|---|---|
| General advice | Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. |
| Inhalation | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician. |
| Self-protection of the first aider | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|---------------------------|
| Symptoms | No information available. |
|-----------------|---------------------------|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|---------------------------|------------------------|

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media Large Fire | Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | Yes. |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| | |
|-----------------------------|--|
| Personal precautions | Evacuate personnel to safe areas. Use personal protective equipment as required. See |
|-----------------------------|--|

section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

Other information

Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up**Methods for containment**

Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up

Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up.

8. Exposure controls/personal protection**Control parameters****Exposure Limits**

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|-----------------|-------------------------------------|--|--|
| Dichloromethane | TWA: 50 ppm | TWA: 25 ppm (vacated) TWA: 500 ppm (vacated) STEL: 2000 ppm 5 min in any 3 h (vacated) Ceiling: 1000 ppm STEL: 125 ppm see 29 CFR 1910.1052 | IDLH: 2300 ppm |
| Methanol | STEL: 250 ppm TWA: 200 ppm S* | TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S* | IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³ |

Biological occupational exposure limits

| | |
|-----------------|---|
| Chemical name | ACGIH |
| Dichloromethane | 0.3 mg/L - urine (Dichloromethane) - end of shift |
| Methanol | 15 mg/L - urine (Methanol) - end of shift |

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state Liquid
Appearance Clear
Color Colorless
Odor No information available
Odor threshold No information available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|----------------------|--------------------------------|
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling range | No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | None known |
| Lower flammability or explosive limits | No data available | None known |
| Vapor pressure | No data available | None known |
| Relative vapor density | No data available | None known |
| Relative density | 1.2740 | |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |

| | | |
|----------------------------------|-------------------|------------|
| Decomposition temperature | | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |

Other information

| | |
|-----------------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC content | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Heat, flames and sparks. |
| Incompatible materials | None known based on information supplied. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information**Information on likely routes of exposure****Product Information**

| | |
|---------------------|--|
| Inhalation | May be harmful if inhaled. |
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components). |
| Ingestion | Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components). |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|---------------------------|
| Symptoms | No information available. |
|-----------------|---------------------------|

Acute toxicity**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|----------------------------------|----------------|
| ATEmix (oral) | 914.30 mg/kg |
| ATEmix (dermal) | 1,558.40 mg/kg |
| ATEmix (inhalation-gas) | 99,999.00 ppm |
| ATEmix (inhalation-vapor) | 41.6976 mg/l |

ATEmix (inhalation-dust/mist) 8.949 mg/l

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------|----------------------|--------------------------|-------------------------|
| Dichloromethane | = 1600 mg/kg (Rat) | > 2000 mg/kg (Rat) | = 53 mg/L (Rat) 6 h |
| Methanol | = 6200 mg/kg (Rat) | = 15840 mg/kg (Rabbit) | = 22500 ppm (Rat) 8 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|-----------------|-------|----------|------------------------|------|
| Dichloromethane | A3 | Group 2A | Reasonably Anticipated | X |

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

STOT - repeated exposure No information available.

Target organ effects Liver, Respiratory system, Eyes, Skin, Central nervous system, Gastrointestinal tract (GI), Central Vascular System (CVS), Lungs.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-----------------|--|--|----------------------------|---|
| Dichloromethane | EC50: >500mg/L (96h, Pseudokirchneriella subcapitata) EC50: >500mg/L (72h, Pseudokirchneriella subcapitata) | LC50: 140.8 - 277.8mg/L (96h, Pimephales promelas) LC50: 262 - 855mg/L (96h, Pimephales promelas) LC50: =193mg/L (96h, Lepomis macrochirus) | - | EC50: 1532 - 1847mg/L (48h, Daphnia magna) EC50: =190mg/L (48h, Daphnia magna) |
| Methanol | - | LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus) | - | - |

Persistence and degradability No information available.

Bioaccumulation

Component Information

| Chemical name | Partition coefficient |
|-----------------|-----------------------|
| Dichloromethane | 1.25 |
| Methanol | -0.77 |

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers. Dispose of contents/containers in accordance with local regulations.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

| | |
|----------------------------|---|
| <u>DOT</u> | Regulated |
| UN number or ID number | UN2810 |
| Proper shipping name | Toxic, liquids, organic, n.o.s. (dichloromethane) |
| Transport hazard class(es) | 6.1 |
| Packing group | III |
| DOT Marine Pollutant | No |

| | |
|----------------------------|---|
| <u>TDG</u> | Regulated |
| UN number or ID number | UN2810 |
| UN proper shipping name | Toxic, liquids, organic, n.o.s. (dichloromethane) |
| Transport hazard class(es) | 6.1 |
| Packing group | III |

| | |
|----------------------------|---|
| <u>ICAO (air)</u> | Regulated |
| UN number or ID number | UN2810 |
| UN proper shipping name | Toxic, liquids, organic, n.o.s. (dichloromethane) |
| Transport hazard class(es) | 6.1 |
| Packing group | III |

| | |
|----------------------------|---|
| <u>IATA</u> | Regulated |
| UN number or ID number | UN2810 |
| UN proper shipping name | Toxic, liquids, organic, n.o.s. (dichloromethane) |
| Transport hazard class(es) | 6.1 |
| Packing group | III |

| | |
|----------------------------|---|
| <u>IMDG</u> | Regulated |
| UN number or ID number | UN2810 |
| UN proper shipping name | Toxic, liquids, organic, n.o.s. (dichloromethane) |
| Transport hazard class(es) | 6.1 |
| Packing group | III |

15. Regulatory information

International Inventories

| | |
|----------------------|---|
| TSCA | Complies. |
| DSL/NDL | Complies. |
| EINECS/ELINCS | Contact supplier for inventory compliance status. |
| ENCS | Contact supplier for inventory compliance status. |
| IECSC | Contact supplier for inventory compliance status. |
| KECL | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| AIIC | Contact supplier for inventory compliance status. |
| NZIoC | Contact supplier for inventory compliance status. |

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | SARA 313 - Threshold Values % |
|----------------------------|-------------------------------|
| Dichloromethane 75-09-2 | 0.1 |
| Methanol 67-56-1 | 1.0 |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-----------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Dichloromethane | - | X | X | - |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | Reportable Quantity (RQ) |
|-----------------|--------------------------|------------------------------------|---|
| Dichloromethane | 1000 lb 1 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ |
| Methanol | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

| Chemical name | California Proposition 65 |
|----------------------------|---------------------------|
| Dichloromethane 75-09-2 | Carcinogen |
| Methanol 67-56-1 | Developmental |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-----------------|------------|---------------|--------------|
| Dichloromethane | X | X | X |
| Methanol | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

| | | | | |
|-------------|---------------------------|-----------------------|---------------------------|------------------------------|
| NFPA | Health hazards 3 | Flammability 0 | Instability 0 | Special hazards - |
| HMIS | Health hazards * 3 | Flammability 0 | Physical hazards 0 | Personal protection X |

Chronic Hazard Star Legend * = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet
Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 30-Aug-2023

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet