

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

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Methanol (Methyl Alcohol), ACS Grade

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Methanol (Methyl Alcohol), ACS Grade

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25426

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
(724)517-1954

Emergency telephone number:

Fisher Science Education
Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:



Flammable

Flammable liquids, category 2



Toxic

Acute toxicity (oral, dermal, inhalation), category 3



Health hazard

Specific target organ toxicity following single exposure, category 1

AcTox Dermal. 3.

Flammable liq. 2.

AcTox Oral. 3.

AcTox Inhaln. 3.

Stot SE. 1.

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapour.

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

Causes damage to organs.

Precautionary statements:

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

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Read label before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Do not breathe dust/fume/gas/mist/vapours/spray.

Specific treatment (see supplemental first aid instructions on this label).

IF ON SKIN: Wash with soap and water.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific measures (see supplemental first aid instructions on this label).

Take off contaminated clothing and wash before reuse.

Wash contaminated clothing before reuse.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF exposed: Call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Store locked up.

Store in a well ventilated place. Keep cool.

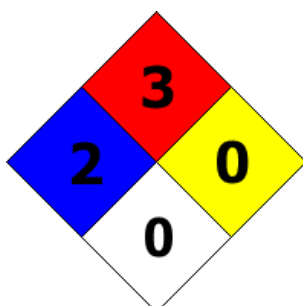
Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

| | |
|---------------------|---|
| Health | 2 |
| Flammability | 3 |
| Physical Hazard | 0 |
| Personal Protection | X |

HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:

CAS 67-56-1

Methanol

>90 %

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Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Get medical assistance. If breathing is difficult, give oxygen.

After skin contact:

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Rinse or flush eye gently with water for at least 15-20 minutes, lifting upper and lower lids. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Dilute mouth with water or milk after rinsing. Get medical assistance.

Most important symptoms and effects, both acute and delayed:

Poison. Toxic by ingestion, absorption through skin and inhalation, potentially causing irreversible effects. Irritating to eyes, skin, and respiratory tract. Irritation- all routes of exposure. Shortness of breath. Nausea. Headache. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. May cause gastrointestinal irritation, vomiting, and diarrhea. Central nervous system disorders. Skin disorders, preexisting eye disorders, gastrointestinal tract. Toxic: danger of very serious irreversible effects by inhalation, ingestion or absorption through skin. Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse kidney and liver effects.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Dry chemical, foam, dry sand, or Carbon Dioxide. Water spray can keep containers cool.

Unsuitable extinguishing agents:

Water may be ineffective.

Special hazards arising from the substance or mixture:

Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

Advice for firefighters:

Protective equipment:

Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Remove all sources of ignition. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Take precautions against static discharge.

SECTION 6: Accidental release measures

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Personal precautions, protective equipment and emergency procedures:

Use spark-proof tools and explosion-proof equipment. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Ensure adequate ventilation.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Should not be released into environment.

Methods and material for containment and cleaning up:

If necessary use trained response staff or contractor. Remove all sources of ignition. Contain spillage and then collect. Do not flush to sewer. Absorb with a noncombustible absorbent material such as sand or earth and containerize for disposal. Ventilate area of leak or spill. Use spark-proof tools and explosion-proof equipment. Follow proper disposal methods. Refer to Section 13.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Use in a chemical fume hood. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Take precautions against static discharge.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Keep container tightly sealed. Store with like hazards. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection



Control Parameters:

67-56-1, Methanol, ACGIH: 250 ppm STEL; 200 ppm TWA.
67-56-1, Methanol, NIOSH: 250 ppm STEL; 325 mg/m³ STEL.
67-56-1, Methanol, NIOSH: 200 ppm TWA; 260 mg/m³ TWA.

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area.

Respiratory protection: Use in a chemical fume hood. If exposure limit is exceeded, a full-face respirator with organic cartridge may be worn.

Protection of skin: Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

| | | | |
|--|------------------------|-------------------------------|----|
| Appearance (physical state, color): | Clear colorless liquid | Explosion limit lower: | 6 |
| | | Explosion limit upper: | 31 |

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| Odor: | Alcohol | Vapor pressure at 20°C: | 128 hPa @ 20°C |
| Odor threshold: | Not Available | Vapor density: | 1.11 |
| pH-value: | Not Available | Relative density: | 0.79 |
| Melting/Freezing point: | -98°C | Solubilities: | Miscible at 20 °C. |
| Boiling point/Boiling range: | 64.7°C @ 760mmHg | Partition coefficient (n-octanol/water): | Not Available |
| Flash point (closed cup): | 12°C | Auto/Self-ignition temperature: | 455°C |
| Evaporation rate: | 5.2 | Decomposition temperature: | Not Available |
| Flammability (solid, gaseous): | Flammable | Viscosity: | a. Kinematic: Not Available b. Dynamic: Not Available |
| Density at 20°C: | Not Available | | |

SECTION 10: Stability and reactivity

Reactivity:

Vapours may form explosive mixture with air.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Excess heat, Incompatible Materials, flames, or sparks.

Incompatible materials:

Oxidizing agents, reducing agents, alkali metals, acids, sodium, potassium, metals as powders, acid chlorides, acid anhydrides, powdered magnesium, and aluminum.

Hazardous decomposition products:

carbon monoxide, formaldehyde.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

(rat) LD-50 5628 mg/kg

Dermal:

(rabbit) LD-50 15800 mg/kg

Inhalation:

(rat) LC-50 130,7 mg/l

Chronic Toxicity: No additional information.

Corrosion Irritation:

Dermal:

Irritating to skin

Ocular:

Irritating to eyes

Sensitization: No additional information.

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Numerical Measures: No additional information.

Carcinogenicity:

Teratogenicity : has occurred in experimental animals.

Mutagenicity:

Mutagenetic effects have occurred in experimental animals.

Reproductive Toxicity:

Developmental Effects (Immediate/Delayed) have occurred in experimental animals.

SECTION 12: Ecological information

Ecotoxicity:

Freshwater Fish: 96 Hr LC50 Pimephales promelas: 28200 mg/L

Freshwater Fish: 96 Hr LC50 Oncorhynchus mykiss: 19500 - 20700 mg/L

Freshwater Fish: 96 Hr LC50 Pimephales promelas: >100 mg/L

Freshwater Fish: 96 Hr LC50 Oncorhynchus mykiss: 18 - 20 mL/L

Freshwater Fish: 96 Hr LC50 Lepomis macrochirus: 13500 - 17600 mg/L

Persistence and degradability:

Not persistent.

Bioaccumulative potential:

Not Bioaccumulative.

Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Methanol RCRA waste code U154. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Absorb with a noncombustible absorbent material such as sand or earth and containerize for disposal. Provide ventilation. Have fire extinguishing agent available in case of fire. Eliminate all sources of ignition. Use spark-proof tools and explosion-proof equipment. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

UN1230

Limited Quantity Exception:

None

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Bulk:

RQ (if applicable): None

Proper shipping Name: Methanol.

Hazard Class: 3, 6

Packing Group: II.

Marine Pollutant (if applicable): No additional information.

Comments: None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Methanol.

Hazard Class: 3, 6

Packing Group: II.

Marine Pollutant (if applicable): No additional information.

Comments: None



SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic, Fire

SARA Section 313 (Specific toxic chemical listings):

67-56-1 Methanol.

RCRA (hazardous waste code):

67-56-1 Methanol RCRA waste code U154.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

67-56-1 Methanol 5000 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

67-56-1 Methanol.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

67-56-1 Methanol.

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SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.
PNEC Predicted No-Effect Concentration (REACH).
CFR Code of Federal Regulations (USA).
SARA Superfund Amendments and Reauthorization Act (USA).
RCRA Resource Conservation and Recovery Act (USA).
TSCA Toxic Substances Control Act (USA).
NPRI National Pollutant Release Inventory (Canada).
DOT US Department of Transportation.
IATA International Air Transport Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).

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