BUILDING VISION AND VARIETY

Date: 3/1/2019

Product Code

SAFETY DATA SHEET

1. Identification

Product Name: Methanol

Product Code:

SDS Date: 3/1/2019

Address: BVV
1251 Frontenac Rd. Ste 150
Naperville IL 60563

Phone: (331) 281-0154

CHEMTEL: (800) 255-3924

2. Hazard(s) Identification

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)

Pictogram

Signal Word Danger

Hazard Statement

Highly flammable liquid and vapor
Toxic if swallowed, in contact with skin, or if inhaled
Causes damage to organs.

Precautionary

Prevention:
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.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not eat, drink, or smoke when using this product.
Do not breathe mist/vapors/spray.
Use only outdoors or in a well-ventilated area.

Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash skin with plenty of water/shower.

In case of fire: consider water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
If swallowed: Immediately call a poison center/doctor. Rinse mouth.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advice/attention.

3. Composition/Information On Ingredients

Name	Cas	Concentration
Methanol	67-56-1	1-100%

4. First-aid Measures

If Inhaled:

If symptoms are experienced, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In Case of Skin Contact:

Wash off for 20 minutes. Remove contaminated clothing, and any extraneous chemical.

In Case of Eye Contact:

Immediately flush eyes with water for at least 20 minutes while holding eyelids open. Remove contact lenses. Get medical attention if irritation persists.

If Swallowed:

Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Medical care must emphasize the control of acidosis and the use of intravenous bicarbonate has been lifesaving. Evidence is good that treatment of methanol absorption is enhanced through the administration of ethanol, which should be given to produce a blood level of at least 0.1%. Ethanol diminishes the production of toxic metabolites of methanol. Blood methanol level of 50 mg/100mL is an indication for hemodialysis, which has improved the prognosis of methanol intoxication. Methanol is often confused with beverage alcohol (ethylalcohol). Care must be taken to prevent its ingestion, the most frequent cause of methanol poisoning. Prevent aspiration of vomit. Turn victim's head to the side. Do not induce vomiting. If the material is swallowed, get medical attention or advice.

Note to Physician:

In case of ingestion or massive inhalation, observe victim as an inpatient because of slow metabolism causes latent period of 24 hours between exposure and acidosis and blindness.

5. Fire-fighting Measures

Extinguishing Media:

Use methods appropriate for the surrounding fire. Consider carbon dioxide, dry chemical powder, dry sand, limestone powder, or alcohol resistant foam.

Advice for Firefighters

Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for fire-fighting if necessary.

Products of Combustion:

Incomplete combustion may form carbon monoxide. Fire or intense heat may cause violent rupture of packages. Flash back possible over considerable distance. May form explosive mixtures in air. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes. In the event of fire, cool tanks with water spray.

HAZARD	HMIS	NFPA
Toxicity	1	1
Fire	3	3
Reactivity	0	0

6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

For large spills wear gloves, Tyvek suits, safety glasses, and appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Special Properties:

Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

Environmental Precautions: Prevent discharge to open bodies of water, municipal sewers, and watercourses.

Methods and Materials for Containment and Clean Up:

Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth. Control runoff and isolate discharged material for proper disposal. Approach release from upwind. Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container.

7. Handling and Storage

Safe Handling:

Keep away from heat, sparks and flame. Use only with adequate ventilation.
To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Safe Storage:

Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.
Store locked up.

8. Exposure Controls/Personal Protection

Name		CAS	
Methanol		67-56-1	
OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
Not Available	Not Available	200 ppm	250 ppm

Engineering Control:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Eye/Face Protection:

Splash proof chemical goggles and face shield.

Hand Protection:	Butyl rubber gloves.
Body Protection:	Avoid skin contact. If product comes in contact with clothing, immediately remove soaked clothing and shower. Wear long sleeve shirts and trousers without cuffs.
Respiratory Protection:	Wear appropriate respirator when ventilation is inadequate.
Other Protective Equipment:	Facilities storing or utilizing this material should be equipped with eyewash and safety shower facilities.

9. Physical and Chemical Properties

Appearance:	Methanol	Clear liquid
Odor:	Methanol	Characteristic
Color:	Methanol	Not Available
pH:	Methanol	Not Available
Melting Point:	Methanol	144°F (-97.72°C)
Freezing Point:	Methanol	Not Available
Density:	Methanol	49.412 lb/ft3 (0.7915g/cm3)
Flash Point:	Methanol	11°C
Evaporation Rate:	Methanol	Not Available
Flammability:	Methanol	Class IB Flammable Liquid
Upper Explosion Limit:	Methanol	6%
Lower Explosion Limit:	Methanol	36.50%
Octanol/Water partition coefficient (Kow)	Methanol	Not Available
Water Solubility:	Methanol	Soluble
Auto Ignition Temp:	Methanol	385°C
Decomposition Temp:	Methanol	Not Available
Viscosity:	Methanol	Not Available

10. Stability and Reactivity

Chemical Stability:	This material is considered stable at ambient temperatures 70ºC (21ºC).
Possibility of Hazardous Reactions:	This product will not undergo polymerization.
Conditions to Avoid:	Flames, sparks, electrostatic discharge, heat and other ignition sources.
Incompatible Materials:	Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous Decomposition Products:	Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. Toxicological Information

Name:	**CAS:**
Methanol	67-56-1
LD50: Oral, Mouse - 7300 mg/Kg	
LD50: Oral, Rabbit - 14200 mg/Kg	
LD50: Oral, Rat - 5628 mg/Kg	
LD50: Skin, Rabbit - 15800 mg/Kg	
LD50: Inhalation, Rat - 64000 ppm	
Inhalation:	An irritant to the mucous membranes. Toxic effects exerted upon nervous system, particularly the optic nerve. Once absorbed into the body, it is very slowly eliminated. Symptoms of over-exposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death. A person may get better but then worse up to 30 hours later.
Ingestion:	Toxic. Symptoms similar to those for inhalation, but severity and speed of appearance may be greater. May be fatal or cause blindness. Usual fatal dose: 100 – 125 ml. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.
Skin Contact:	Methyl Alcohol is a defatting agent and may cause skin to become dry and cracked. Skin absorption can occur in harmful amounts; symptoms may parallel inhalation exposure.
Eye Contact:	Irritant, characterized by a burning sensation, redness, tearing, inflammation, possible corneal injury, painful sensitization to light. Continued exposure may cause lesions.
Chronic Exposure:	Marked impairment of vision has been reported. Repeated or prolonged skin contact may cause dermatitis. Chronic exposure may cause reproductive disorders and teratogenic effects. Laboratory
Mutagenic Effects:	Laboratory experiments have resulted in mutagenic effects
Carcinogenic Effects:	Not Available
Teratogenic Effects:	Chronic exposure may cause reproductive disorders and teratogenic effects.

12. Ecological Information

Name	CAS	Toxicity
Methanol	67-56-1	EC50 (48 h) : 13,200 mg/l Species : Rainbow trout (Oncorhynchus mykiss) EC50 (48 h) : 16,000 mg/l Species : Bluegill sunfish (Lepomis macrochirus) EC50 (48 h) : > 10,000 mg/l Species : Daphnia

13. Disposal Considerations

Dispose of in accordance with local, state, and federal regulations.

14. Transportation Information

Proper Shipping Name:	Methanol
Hazard Class	3
Identification Number:	UN1230
Packing Group:	II
Label	Flammable
Ship:	UN1230 METHANOL CLASS 3 PG II

15. Regulatory Information

Name	**CAS**
TSCA Inventory	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
SARA 302/304	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
SARA 313	Methanol (CAS #67-56-1) 1.0% de minimus
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: Methanol [CAS No. 67-56-1] RQ = 5,000
SARA 311/312	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Fire Hazard
PROP 65	This product contains a chemical (Methanol) known to the State of California to cause birth defects or other developmental harm.

For more information, go to: www.P65Warnings.ca.gov

16. Other Information, Including Date of Preparation or Last Revision

SDS Date:	3/1/2019

Disclaimer: The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and

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