

Safety Data Sheet

METHYL ALCOHOL (METHANOL)

Section 1 - Chemical Product and Company Identification

SDS Name: Methanol

Catalog Numbers: SO-372

Company Identification: ROWLEY BIOCHEMICAL
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

xc

Section 2 - Hazards Identification

GHS Classifications

HEALTH HAZARDS

H301-Acute Oral Toxicity: 3
H311-Acute Dermal Toxicity:
H332-Acute Inhalation toxicity: 4
H315-Skin Corrosion/Skin Irritation: 2
H318-Eye damage/Irritation: 1
H334-Respiratory Sensitization: 1B
H317-Skin Dermal Sensitization: 1B
H341-Germ Cell Mutagenicity: 2
H361-Reproductive Toxicity: 2
H371-Specific Target Organ Toxicity: 2

PHYSICAL HAZARDS

H225-Flammability: 2

ENVIRONMENTAL HAZARDS

H400-Aquatic acute environmental Hazards: 1

Chronic environmental Hazards: Not classified

Pictograms or Hazard symbols and Hazard statement.



**Toxic if swallowed.
Toxic in contact with skin.**



**Harmful if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.**



Causes serious eye damage.



Highly flammable liquid and vapour



May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Suspected of causing genetic defects.

Suspected of damaging fertility or the unborn child.

May cause damage to the Organs.

Precautionary Statement Prevention

H301

P264 Wash thoroughly after handling.

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

P301 + P310 If swallowed, immediately call a physician.

P330 Rinse mouth.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

H311

P280 Wear protective gloves, clothing, and eye and face protection.

P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.

P312 Call a physician if you feel unwell

P361 + P363 Take off immediately all contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

H332

P261 Avoid breathing fumes/mist/vapors.

P304 + P340 If inhaled, remove person to fresh air and keep comfortable for breathing.

1 Use only outdoors or in a well-ventilated area.

P312 Call a physician if you feel unwell.

H315

P280 Wear protective gloves, clothing, and eye and face protection.

P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.

P332 + P313 If skin irritation occurs, get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

H318

P280 Wear eye and face protection.

P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes.

P337 + P313 If eye irritation persists, get medical advice/attention.

H334

P261 Avoid breathing fumes/mist/vapors.

P285 In case of inadequate ventilation, wear respiratory protection.

P304+P341 IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

H317

P272 Contaminated work clothing should not be allowed out of the work place.

P333+P313 IF ON SKIN: Wash with plenty of soap and water.

P363 Wash contaminated clothing before reuse.

H341+H361

P201 Obtain special instructions before use.

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

P281 Use personal protective equipment as required.

P308 + P313 If exposed or concerned, get medical advice/attention.

P405 Store locked up.

H371

P260 Do not breathe fume/gas/mist/vapors.

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

P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
67-56-1	Methyl Alcohol	100 v/v

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

Oral Exposure: If Swallowing seek immediate medical advice.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

General Information: Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Flash Point: N/A

Autoignition Temperature: N/A

Explosion Limits, Lower: N/A

Upper: N/A

NFPA Rating: (estimated) Health: 1; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear protective gear. Eliminates all sources of ignition.

Methods for Cleaning up: Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials. Protect from heat. Vapors heavier than air, may travel considerable distance and ignite or explode.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical and Chemical Properties
--

Physical State: Liquid

Odor: Pungent when crude

Molecular Weight: 32.04 g/mole

Color: Colorless

Vapor Pressure: 12.3 kPa @ 20 deg. C

Vapor Density: 1.11

Boiling Point: 64.5 deg. C

Freezing/Melting Point: -97.8 deg. C

Critical Temperature: 240 deg. C

Solubility: Soluble in cold water, hot water.

Specific Gravity: 0.7915

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, oxidizers.

Incompatibilities with Other Materials: Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

Epidemiology: Not Available

Teratogenicity: Not Available

Reproductive Effects: Oral, rat: TDL=100 mg/kg 1 day prior to mating
Oral, human TDL 1428 mg/kg

Neurotoxicity: No information available.

Mutagenicity: Not Available

Other Studies: May affect behavior/central nervous system, urinary system kidneys(renal failure, cardiovascular system, liver.

CAS# 67-56-1

LD50/LC50:

CAS# 67-56-1

Oral, mouse: LD50 = 5628 mg/kg;

Dermal, rabbit: LD50 = 15800 mg/kg;

Vapor, rat: LC50 = 64000 ppm 4 hours

Carcinogenicity:

CAS# 67-56-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Not Available

Teratogenicity: Not Available

Reproductive Effects: Oral, rat: TDLo= 2500 mg/kg (female 1-22 day(s) after conception)
Fertility-post implantation mortality (e.g. dead and/or resorbed implants per total number of implants)

Neurotoxicity: No information available.

Mutagenicity: DNA Adduct: Mouse, Ascites tumor= 70 umol/L; DNA Adduct: Mammal –
species unspecified Lymphocyte = 1830nmol/L

Other Studies: Not Available

Section 12 - Ecological Information

Ecotoxicity:

(Methyl Alcohol) in water LC50: 29400 mg/l 96 hours (Fathead Minnow)

Environmental: When released to the atmosphere it will photo degrade in hours.

Physical: No information available.

Other: No information available.

Section 13 - Disposal Considerations

Appropriate method of disposal of substance or preparation:

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

Section 14 – Transport Information

DOT

Proper shipping name: Methanol

UN1230

PG II

Hazard class 3 (flammable)

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

F

Risk Phrases:

R 11 Highly flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed

R36/38 Irritating to eyes and skin

R51 Toxic to aquatic organisms

R61 May cause harm to the unborn child

Safety Phrases:

S20/21 When using do not eat, drink or smoke

S2 Keep out of the reach of children

S 16 Keep away from sources of ignition - No smoking.

S 33 Take precautionary measures against static discharges.

S 7 Keep container tightly closed.

S 9 Keep container in a well-ventilated place

Section 16 - Additional Information

MSDS Creation Date: 2/2/12

Revision #1. 12/2/14 RC

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.