

# MATERIAL SAFETY DATA SHEET

Potassium Hydroxide 0.1 Normal in Methanol

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Potassium Hydroxide 0.1 Normal in Methanol

Product Code: 217-05

Material Uses:

Manufacturer: OFI Testing Equipment, Inc.  
11302 Steeplecrest Drive  
Houston, TX 77065 USA  
Phone: (713) 880-9885  
Fax: (713) 880-9886

Entry Date : 5/10/2010

Print Date: 7/30/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300  
Canutec 613-996-6666

Health:	1			
Flammability:	3			
Reactivity:	0			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA = Not Applicable		NE = Not Established		

## SECTION 2 HAZARD IDENTIFICATION

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Emergency Overview: Poison! Danger! May Be Fatal Or Cause Blindness If Swallowed. Harmful If Inhaled Or Absorbed Through Skin. Cannot Be Made Nonpoisonous. Flammable Liquid And Vapor. Corrosive. Causes Severe Burns To Skin, Eyes, Respiratory Tract, And Gastrointestinal Tract. Affects The Liver.

Inhalation: Inhalation Produces Damaging Effects on the Mucous Membranes and Upper Respiratory Tract. May Cause Ulceration and Perforation of the Nasal Septum. Exposure to High Concentrations has a Narcotic Effect, Producing Symptoms of Dizziness, Drowsiness, Headache, Staggering, Unconsciousness and Possibly Death.

Ingestion: May Cause Sore Throat, Vomiting, Diarrhea. May Cause Abdominal Pain, Dizziness, Intense Thirst, Shock, and Liver Damage. May Cause Vascular Collapse and Damage. May Cause Kidney Failure. May be Followed by Toxic Nephritis.

Skin: May Cause Irritation with Redness, and Pain. May be Absorbed Through the Skin with Possible Systemic Poisoning, Affecting Kidney and Liver Functions.

Eye Contact: Vapors Cause Eye Irritation, Blurred Vision, Redness and Pain and Severe Tissue Burns. Can Cause Corneal Burns to Eye Tissue and Permanent Eye Damage.

Chronic Exposure: Repeated or Prolonged Exposure can Cause Ulceration and Perforation of the Nasal Symptom, Respiratory Irritation, Corneal, Liver, and Kidney Damage.

Aggravated by Exposure: Persons with Pre-Existing Skin Disorders or Eye Problems or Impaired Respiratory Function, or Impaired Liver or Kidney Function may be More Susceptible to the Effects of this Agent.

## SECTION 3 MIXTURE COMPONENTS

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SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input checked="" type="checkbox"/>	Methanol (Methyl Alcohol)	CAS# 67-56-1	Balance	V/V	OSHA TWA 200 ppm, ACGIH STEL 250 ppm
<input type="checkbox"/>	Potassium Hydroxide	CAS# 1310-58-3	0.56%	W/V	OSHA PEL 2 mg/m <sup>3</sup>
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	<1%	V/V	None Established

**SECTION 4 FIRST AID MEASURES**

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

**SECTION 5 FIRE FIGHTING MEASURES**

Fire Extinguisher Type: Carbon Dioxide, dry chemical powder or appropriate foam

Fire / Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak acid.

Ventilate area or Leak or Spill. Remove all Sources of Ignition. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Isolate Hazard Area. Keep Unnecessary and Unprotected Personnel from Entering. Contain and Recover Liquid when Possible. Use Non-Sparking Tools and Equipment. Neutralize with Soda Ash or Lime and Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and Place in a Chemical Waste Container. Do Not Use Combustible Materials, such as Saw Dust. Do Not Flush to Sewer! US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

**SECTION 7 HANDLING AND STORAGE**

Keep away from heat and flame. Do not get in eyes, on skin, on clothing. Use with adequate ventilation.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

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Respiratory Protection: NIOSH/MSHA-approved respirator  
Ventilation  
Local Exhaust   
Mechanical   
Protective Gloves: NIOSH Approved Gloves  
Eye Protection: Splash Goggles  
Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Melting Point:	~ -94 °C	Percent Volatile by Volume:	> 98%
Boiling Point:	~ 65 °C	Evaporation Rate	4.6
Vapor Pressure:	~ 97mm Hg @ 70°F	Evaporation Standard	
Vapor Density:	~ 1.11	Auto Ignition Temp	725° F (385° C)
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	6%
Appearance /Odors:	Clear liquid, methanolic odor	Upper Flamm. Limit in Air	36%
Flash Point:	~ 11.1 °C		
Specific Gravity:	~ 0.79		

**SECTION 10 STABILITY AND REACTIVITY INFORMATION**

Stability: Stable  
Conditions to Avoid: Avoid contact with heat, sparks, flames, or other sources of ignition.  
Materials to Avoid: Strong oxidizing agents, metals, acids.  
Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, formaldehyde.  
Hazardous polymerization: Will Not Occur  
Conditions to Avoid: None known

**SECTION 11 Toxicological Information**

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category- None

**SECTION 12 Ecological Information**

Environmental Fate: The following statements refer to the environmental fate of methanol. When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into the water, this material is expected to have a half-life between 1 and 10 days. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to exist in the aerosol phase with a short half-life. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into air, this material is expected to have a half-life between 10 and 30 days. When released into the air,

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this material is expected to be readily removed from the atmosphere by wet deposition. Environmental Toxicity: The methanol portion is expected to be slightly toxic to aquatic life. Potassium Hydroxide: TLm: 80 ppm/Mosquito fish/ 24 hr./ Fresh water

**SECTION 13 Disposal Considerations**

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**SECTION 14 Transport Information**

DOT Classification: Methanol, 3, UN1230, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

**SECTION 15 Regulatory Information**

Chemical Inventory Status –  
Part 1:Ingredient  
Methyl Alcohol (67-56-1)  
Potassium Hydroxide (1310-58-3)  
TSCA Yes Yes  
EC Yes Yes  
Japan YES Yes  
Australia Yes Yes

Chemical Inventory Status –  
Part 2:Ingredient  
Methyl Alcohol (67-56-1)  
Potassium Hydroxide (1310-58-3)  
Korea Yes Yes  
DSL Yes Yes  
NDSL No No  
Phil. Yes Yes

Federal, State & International Regulations –  
Part 1: Ingredient.  
Methyl Alcohol (67-56-1)  
Potassium Hydroxide (1310-58-3)  
RQ No No  
TPQ No No  
List YES No  
Chemical Catg No No.

Federal, State & International Regulations –  
Part 2:Ingredient  
Methyl Alcohol (67-56-1)  
Potassium Hydroxide (1310-58-3)  
CERCLA 5000 1000  
261.33 U154 No  
8(d) No No

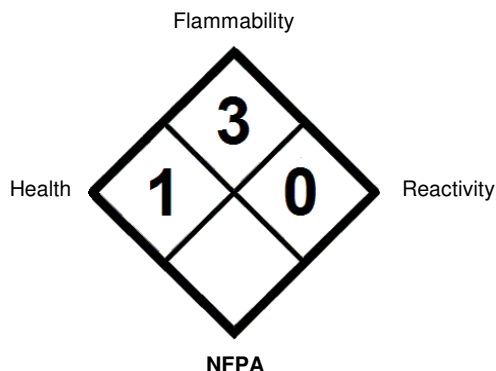
Chemical Weapons Convention: No  
TSCA 12 (b):No  
CDTA:No MIXTURE/LIQUID  
SARA 311/312: Acute: YES  
Chronic: YES  
Fire: YES  
Pressure: No  
Reactivity: No  
Australian Hazchem Code: 2PE  
Poison Schedule: S6

**SECTION 16 Additional Information**

Conditions aggravated/target organs: Flammable! Poison! Corrosive!  
Ingestion or inhalation may be fatal or cause blindness. Persons with pre-existing eye, skin, liver or kidney disorders will be more susceptible. Acute:

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Headache, nausea, vomiting, respiratory failure, CNS depression, skin and eye irritation or burns, GI tract irritation or burns. Chronic: Dermatitis, corneal damage, blindness, hearing loss.



Revisions

7/30/2010	0.1	updated msds to 16 section from 10 section msds. STN
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