



Mitsubishi Gas Chemical America, Inc

## Safety Data Sheet

Product: Methanol

Date: Sept. 20, 2018

Page 1 of 14

Complying with OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200.  
Prepared to GHS Rev. 3.

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

**Trade Name:** Methanol  
**Other names:** Methyl alcohol; Wood alcohol; Carbinol; Methyl hydroxide, Methyl hydrate  
**REACH Registration:** 603-001-00-X  
**CAS Number:** 67-56-1  
**EC Number:** 200-659-6

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

**Relevant identified uses:** Industrial solvent and chemical intermediate  
**Uses advised against:** Uses other than those described above.

#### 1.3 Details of the supplier of the safety data sheet

##### **Manufactured By:**

**Company Name:** Mitsubishi Gas Chemical Company, Inc.  
**Company Address:** Mitsubishi Building, 5-2 Marunouchi 2-chome  
Chiyoda-ku, Tokyo 100-8324, Japan

##### **Distributed By:**

**Company Name:** Mitsubishi Gas Chemical America, Inc.  
**Company Address:** 655 Third Avenue, 19<sup>th</sup> Floor  
New York, NY 10017

**Company Tel (Enquiries):** (212) 687-9030 (US)  
81-3-3283-4713 (Japan)

#### 1.4 Emergency telephone number

**Emergency telephone number (including hours of operation):**  
CHEMTREC - (800) 424-9300 (for transportation emergencies)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HAZCOM 2012).

##### **Physical Hazards:**

Flammable Liquid Category 2 -H225

##### **Health Hazards:**

Acute Toxicity Category 3 (Oral) – H301  
Acute Toxicity Category 3 (Dermal) – H311  
Acute Toxicity Category 3 (Inhalation) – H331  
Specific Target Organ Toxicity (Single Exposure) Category 1– H370

##### **Environmental Hazards:**

Not adopted by OSHA HCS (HAZCOM 2012)

**Hazards not Otherwise Classified (HNOCs):**  
None Known

**2.2 Label elements**

**Labelling in accordance with OSHA 29 CFR 1910.1200.**

**Hazard pictograms:**



**Signal word:** DANGER

**Hazard statements:**  
H225 – Highly flammable liquid and vapor.  
H301 – Toxic if swallowed.  
H311 – Toxic in contact with skin.  
H331 – Toxic if inhaled.  
H370 – Causes damage to organs (optic nerve, eyes, kidneys, liver, Central nervous system).

**Precautionary Statements:**

**Prevention:**  
P210 - Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof [electrical/ventilating/lighting, exhaust] equipment.  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 - Wash thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P321 - Specific treatment (see sections 4-8 of this safety data sheet).  
P330 – Rinse mouth.  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
P322 - Specific measures (see sections 4-8 of this safety data sheet).  
P363 – Wash contaminated clothing before reuse.  
P304 +P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P311 - Call a POISON CENTER or doctor/physician if you feel unwell.  
P307 + P311 - IF exposed: call a POISON CENTER or doctor/physician.  
P370 + P378 - In case of fire: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam to extinguish.

**Storage:** P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
P235 – Keep cool.  
P405 – Store locked up.

**Disposal:** P501: Dispose of contents/container to a suitable disposal site, in accordance with applicable local/regional/national and international regulations.

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### **3.1 Substance**

Methanol (100%)

Product/ Ingredient name	CAS Number	Concentration (Wt. %)
Methanol	67-56-1	100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

### **SECTION 4: FIRST AID MEASURES**

#### **Description of first aid measures**

##### **General:**

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a POISON CENTRE or doctor/physician. Methanol is toxic and flammable. Take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment and remove any sources of ignition).

##### **Inhalation:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Obtain medical attention.

##### **Skin contact:**

Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTRE or doctor/physician. Wash contaminated clothing before reuse.

##### **Eye contact:**

Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Ensure that folded skin of eyelids is thoroughly washed with water. Obtain medical attention if pain, blinking or redness persist.

**Ingestion:**

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Never give anything by mouth to an unconscious person.

**Notes to Physician:**

Gastric lavage

**4.2 Most important symptoms and effects, both acute and delayed**

**Inhalation:**

Toxic if inhaled. Symptoms may include dizziness, headache, nausea and loss of coordination and CNS depression. Metabolic acidosis and severe visual effects can occur following an 8-24-hour latent period. Coma and death, usually due to respiratory failure, may occur if medical treatment is not received. Visual effects may include reduced reactivity and/or increased sensitivity to light, blurred, double and/or snowy vision, and blindness.

**Skin Contact:**

Toxic in contact with skin. Repeated exposure to this material can result in absorption through skin causing a significant health hazard. Repeated and/or prolonged skin contact may cause irritation.

**Eye Contact:**

Eye contact may cause eye irritation. Symptoms include: burning, redness, tearing and swelling.

**Ingestion:**

Ingestion of as little as 10 ml of methanol can cause blindness and 30 ml (1 ounce) can cause death if victim is not treated. Ingestion causes mild central nervous system (CNS) depression with nausea, headache, vomiting, dizziness, incoordination and an appearance of drunkenness. Metabolic acidosis and severe visual effects can occur following an 8-24-hour latent period. Coma and death, usually due to respiratory failure, may occur if medical treatment is not received. Visual effects may include reduced reactivity and/or increased sensitivity to light, blurred, double and/or snowy vision, and blindness.

**Delayed effects of exposure:** The most common permanent adverse health effects following severe methanol poisoning are damage to or death of the nerve leading from the eye to the brain (optic neuropathy or atrophy), resulting in blindness; disease caused by damage to a particular region of the brain, resulting in difficulty walking and moving properly (Parkinsonism); damage to the brain caused by exposure to toxins, resulting in abnormal thought (encephalopathy); and damage to the peripheral nervous system.

**Effects of chronic or repeated exposure:** Methanol is not suspected to be a carcinogen. Chronic or repeated exposure to methanol is suspected to be a developmental toxicity risk. It is unknown whether chronic or repeated exposure to methanol is a reproductive toxicity risk. Methanol may cause birth defects of the central nervous system in humans. Chronic poisoning from repeated exposure to methanol vapor may produce inflammation of the eye (conjunctivitis), recurrent headaches, giddiness, insomnia, stomach disturbances, and visual failure. The most noted health consequences of longer-term exposure to lower levels of methanol are a broad range of effects on the eye. Inflammatory changes and irritation of the skin (dermatitis), occurs with chronic or repeated exposure to methanol.

**4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. The severity of outcome following methanol ingestion may be more related to the time between ingestion and treatment, rather than the amount ingested. Therefore, there is a need for rapid treatment of any ingestion exposure. Antidote is fomepizole which enhances elimination of metabolic formic acid. This must be administered by a trained medical professional only. For specialist advice physicians should contact the Poison Control Center.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1 Extinguishing media**

Suitable extinguishing media:

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing media:

Do not use water jet.

### **5.2 Special hazards arising from the substance or mixture**

Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous combustion products:

Thermal decomposition products include: carbon monoxide, carbon dioxide and formaldehyde.

### **5.3 Advice for firefighters**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode and full protective gear.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

### **6.2 Environmental precautions**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### **6.3 Methods and materials for containment and cleaning up**

#### **Small Spill**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### **Large Spill**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes, on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Avoid release to the environment. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material-handling) equipment. Do not breathe vapor or mist. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### **7.2 Conditions for safe storage, including any incompatibilities**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## **SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION**

### **8.1 Control parameters**

Occupational exposure limit values:

Agency	Value	Source
ACGIH TLV	TWA (8 hr.) - 200 ppm (262 mg/m <sup>3</sup> ) STEL (15 min.) – 250 ppm (328 mg/m <sup>3</sup> ) Absorbed through skin	(United States, 3/2017)
NIOSH REL	TWA (10 hr.) – 200 ppm (260 mg/m <sup>3</sup> ) Absorbed through skin	(United States, 10/2016)



Mitsubishi Gas Chemical America, Inc

## Safety Data Sheet

Product: Methanol

Date: Sept. 20, 2018

Page 7 of 14

OSHA PEL	STEL: 325 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes. TWA: 260 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours. Absorbed through skin.	1989 (United States, 3/1989).
----------	--	-------------------------------

### **Exposure controls**

#### **Appropriate Engineering Measures**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Environmental Exposure Controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **Individual protection measures, such as personal protective equipment:**

##### Eye and face protection:

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

##### Skin protection:

###### Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling this product. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

###### Other skin protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from

static discharges, clothing should include anti-static overalls, boots and gloves. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Respiratory protection:

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).





## Safety Data Sheet

**General Hygiene Considerations**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Avoid breathing mist or vapors. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance:	Colourless liquid @ 77° F (25° C)
Colour:	Clear, colourless
Odour:	Alcohol
Odour threshold:	Not determined
pH:	Unavailable
Melting point/Freezing point:	-144° F (-98° C)
Initial boiling point/boiling range:	147° F (64.5° C)
Flash point:	54° F (12° C) Closed Cup
Evaporation rate:	5.9 (Butyl Acetate = 1)
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits:	
Upper Explosive Limit:	36.5
Lower Explosive Limit:	6.0
Vapour pressure (mm Hg):	97@ 68° F (20° C)
Vapour density (air=1):	1.11
Density:	795 kg/m <sup>3</sup> at 15 °C
Solubility(ies):	Complete (in water)
Partition coefficient Octanol/Water:	LogP <sub>OW</sub> -0.77
Auto-ignition temperature:	867° F (464° C)
Decomposition temperature:	Unavailable
Viscosity (dynamic):	0.544 - 0.59 mPa s at 25 °C
Explosive properties:	None
Oxidising properties:	None

**9.2 Other information:**

No further data available

**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

Reacts violently with oxidants causing fire and explosion hazard.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions.

**10.3 Possibility of hazardous reactions**

Reacts violently with oxidants causing fire and explosion hazard. The vapour mixes well with air, explosive mixtures are easily formed.



**10.4 Conditions to avoid**

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**10.5 Incompatible materials**

Oxidizers, Strong Acids

**10.6 Hazardous Decomposition products:**

Thermal decomposition will produce Carbon oxides and formaldehyde.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute Toxicity**

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

METHANOL – ACUTE TOXICITY DATA		
Test	Species	Dose
LD <sub>50</sub> Oral	Rat	5628 mg/kg
LD <sub>LO</sub> Oral	Man	13 gm/kg
LD <sub>LO</sub> Oral	Human	340 mg/kg
LD <sub>50</sub> Oral	Mouse	870 mg/kg
LD <sub>50</sub> Intraperitoneal	Rat	9540 mg/kg
LD <sub>50</sub> Intravenous	Mouse	5673 mg/kg
LD <sub>50</sub> Subcutaneous	Mouse	9800 mg/kg
LD <sub>50</sub> Dermal	Rabbit	17,100 mg/kg
LC <sub>LO</sub> Inhalation	Rat	64,000 ppm (4 hr.)
LC <sub>50</sub> Inhalation (vapour)	Rat	128,200 mg/m <sup>3</sup> (4 hr.)
LC <sub>50</sub> Inhalation (vapour)	Cat	85,400 mg/L (4 hr.)

**Skin corrosion/irritation:** Does not meet the criteria for classification.

**Serious eye damage/eye irritation:** Does not meet the criteria for classification.

**Respiratory or skin sensitization:** Does not meet the criteria for classification.

**Germ cell mutagenicity:** Does not meet the criteria for classification.

<b>Carcinogenicity:</b>	Does not meet the criteria for classification. No product ingredients are listed as a carcinogen under ACGIH, IARC, NTP and/or OSHA.
<b>Reproductive toxicity:</b>	<p>This product is not classified as Toxic to reproduction. However, animal studies have indicated that Methanol may adversely affect fertility and development of the unborn child.</p> <p><u>Fertility:</u> NOAEC (Rat) = 1.3 mg/L NOAEC (Monkey) = 2.39 mg/L NOAEC (Oral) Sperm = 1000 mg/kg bw/day</p> <p><u>Developmental Toxicity:</u> NOAEC (Rat) = 1.33 mg/L LOAEL (Mouse) = 1700 mg/kg</p>
<b>STOT - Single exposure:</b>	This product causes organ damage (optic nerve, eyes, kidneys, liver, Central nervous system).
<b>STOT - Repeat exposure:</b>	Does not meet the criteria for classification.
<b>Aspiration hazard:</b>	Does not meet the criteria for classification.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity:

This product is not expected to be harmful to the aquatic environment.

Substance name	Toxicity to fish / other aquatic invertebrates
<b>Methanol</b>	96-hr. LC50 - <i>Lepomis macrochirus</i> (Bluegill) – 15,400 mg/L NOEC - <i>Oryzias latipes</i> - 7,900 mg/l - 200 hr 48-hr. EC50 - <i>Daphnia magna</i> (Water flea) - > 10,000 mg/l 96-hr Growth inhibition EC50 - <i>Scenedesmus capricornutum</i> (algae) - 22,000 mg/l 96-hr. ErC50 – Algae – 22,000 mg/L 24 hr.-LC50 – microorganisms - >880 mg/L

## **12.2 Persistence and Degradability:**

Process of degradability			
Process	Degradation rate	Time	Source
Oxygen depletion	76%	5 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
	88%	10 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
	91%	15 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
	95%	20 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
	69%	5 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
	84%	10 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
	85%	15 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
	97%	20 d	European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>

## **12.3 Bioaccumulative potential:**

n-octanol/water (log KOW)	-0.77 (ECHA)
BCF	<10 (<10)

## **12.4 Mobility in soil:**

Henry's law constant	0.461 Pa m <sup>3</sup> /mol @ 25° C
The Organic Carbon normalized adsorption coefficient	0.13 - 1

## **12.5 Results of PBT and vPvB assessment:**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

## **12.6 Other adverse effects:**

None known

## **12.7 Additional information**

Biochemical Oxygen Demand (BOD): 600 - 1,120 mg/g  
Chemical Oxygen Demand (COD): 1,420 mg/g

### SECTION 13: DISPOSAL CONSIDERATIONS

#### **13.1 Waste treatment methods**

##### Product

Incineration is the recommended disposal method for all chemical wastes such as this product. Material collected on absorbent material may be deposited in a landfill in accordance with all applicable local, state and federal regulations.

##### Contaminated packaging

Contaminated packaging may contain traces of the product and therefore should be disposed of in the same way as product.

### SECTION 14: TRANSPORT INFORMATION

#### **International transport regulations**

##### **14.1 UN number**

ADR/RID: UN 1230

IMDG: UN 1230

IATA: UN 1230

##### **14.2 Proper shipping name**

DOT: Methanol  
TDG: Methanol  
ADR/RID: Methanol  
IMDG: Methanol  
IATA: Methanol

##### **14.3 Transport hazard class(es)**

The following transport information is applicable to DOT, TDG, ADR/RID, IMDG and IATA.

**Hazard Class:** 3 (flammable liquids)

**Subsidiary Hazard Class:** 6.1 (Acute Toxicity)

**Packing Group:** II

##### **14.4 Environmental hazard**

Marine Pollutant: No

##### **14.5 Special precautions for user**

Provisions for dangerous goods (ADR) should be complied within the premises.

##### **14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

No data available



Mitsubishi Gas Chemical America, Inc

## Safety Data Sheet

Product: Methanol

Date: Sept. 20, 2018

Page 13 of 14

### Information for each of the UN Model Regulations

#### **Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

UN number	1230
Proper shipping name	METHANOL
Class	3
Classification code	FT1
Packing group	II
Danger label(s)	3+6.1
Special provisions (SP)	279, 802(ADN)
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	D/E
Hazard identification No	336
Emergency Action Code	2WE

#### **International Maritime Dangerous Goods Code (IMDG)**

UN number	1230
Proper shipping name	METHANOL
Class	3
Subsidiary risk(s)	6.1
Packing group	II
Danger label(s)	3+6.1
Special provisions (SP)	279
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-E, S-D
Stowage category	B

#### **International Civil Aviation Organization (ICAO-IATA/DGR)**

UN number	1230
Proper shipping name	Methanol
Class 3 Subsidiary risk(s)	6.1
Packing group	II
Danger label(s)	3
Special provisions (SP)	A104, A113
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L

### **Section 15: REGULATORY INFORMATION**

#### **USA:**

**United States Federal Regulations:** This SDS complies with OSHA 29 CFR 1910.1200. The product is hazardous under OSHA.

**Toxic Substances Control Act (TSCA)** – All components in this product are in compliance with the TSCA Inventory requirements.

#### **Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):**

No product ingredients listed.

#### **SARA Section 313 (Specific toxic chemical listings):**

Methanol (CAS# 67-56-1)

**CERCLA RQ's:**  
Methanol (5000 lbs.)

**STATE REGULATIONS:**

**California Proposition 65:**



**WARNING:** This product can expose you to methanol which is known to the state of California to cause birth defects or other reproductive harm. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Massachusetts Right to Know:**  
Methanol (CAS# 67-56-1)

**New Jersey Right to Know:**  
Methanol (CAS# 67-56-1)

**Pennsylvania Right to Know:**  
Methanol (CAS# 67-56-1)

**Section 16: OTHER INFORMATION**

**Revision Date:** Sept. 20, 2018  
Supersedes previous SDS (July 1, 2013)

**Information Contact:** See Section 1 (Company Identification)

**DISCLAIMER:**

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of information contained herein. Final determination of suitability of any material is the sole responsibility of the information contained herein. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**Document history**

Date of issue: Sept. 20, 2018