



### MATERIAL SAFETY DATA SHEET

## METHANOL

### SECTION 1 - PRODUCT IDENTIFICATION

#### Product Name and Synonyms

Methanol, RQ Methyl Alcohol, Wood Alcohol, Carbinol.

CAS Name and Number: Mixture (see Section 10).

Chemical Family: Alcohol.

Chemical Formula: CH<sub>3</sub>OH, CH<sub>3</sub>CH<sub>2</sub>OH.

#### Manufacturer's Name and Address

GEORGIA-PACIFIC WEST, INC.  
300 W. Laurel Street (98225)  
P.O. Box 1236  
Bellingham, WA 98227  
Telephone: 360-733-4410

#### Emergency Telephone Number

1-800-424-9300 CHEMTREC

### SECTION 2 - HAZARDOUS INGREDIENTS

<u>COMPONENT</u>	<u>% VOLUME</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>	<u>ACGIH TLV®</u>
Methanol	80-95	200 ppm	250 ppm	200 ppm* 250 ppm STEL*
Ethanol	5-20	1000 ppm	None established	1000 ppm

\*Absorption through the skin can contribute significantly to overall exposure.

### SECTION 3 - PHYSICAL PROPERTIES

Appearance and Odor: Clear, colorless liquid with a pungent odor. Vapor Density (Air = 1): 1.11 (methanol).

Molecular Weight: 32.04 (methanol).

Percent Volatile (By Weight): 100%.

Boiling Point (Degrees Fahrenheit): 149 (methanol).

pH: Not applicable.

Melting Point (Degrees Fahrenheit): -144 (methanol).

Solubility in Water: Complete.

Vapor Pressure (MM of Mercury): 96 (methanol).

Evaporation Rate (Butyl Acetate = 1): 5.9 (methanol).

Specific Gravity (Water = 1): 0.78 (methanol).

### SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point: 51°F (11°C) (methanol).

Fire Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam. Water spray may be used to cool fire-exposed metal containers, to dilute and flush spills, to suppress vapors, and to reduce fire intensity.

Flammable Limits (Percent by Volume):

	<u>Lower</u>	<u>Upper</u>
Methanol	6	36
Ethanol	3.3	19

Special Firefighting Procedures & Equipment: Firefighters should use self-contained breathing apparatus operated in positive pressure mode in enclosed areas.

Unusual Fire and Explosion Hazards: Vapors may migrate to distant ignition sources and flash back. Closed containers may explode if exposed to heat. Contact with strong oxidizers may cause fire or explosion.

## SECTION 5 - REACTIVITY DATA

Stability: Unstable \_\_\_ Stable X

**Conditions to Avoid:** Heat, sources of ignition.

**Incompatibility (Materials to Avoid):** Strong oxidizing agents, such as nitrates, perchlorates, peroxides, chromic, nitric, and sulfuric acid.

**Hazardous Decomposition Products:** Thermal-oxidative degradation can produce oxides of carbon. Toxic gases and vapors (i.e., carbon monoxide, formaldehyde) may be released in a fire.

**Hazardous Polymerization:** Will Occur \_\_\_ Will Not Occur X

**Conditions to Avoid:** None known.

## SECTION 6 - HEALTH HAZARD INFORMATION

### Effects of Overexposure

Inhalation may be harmful or fatal. Excessive exposure to vapors can be irritating to eyes, skin, and respiratory tract. Ingesting can cause blindness. Liquid may cause dermatitis.

**Probable Routes of Exposure:** Ingestion, inhalation, skin absorption.

### Emergency First Aid Procedures:

**Eye Contact:** Wash immediately with running water, lifting the lower and upper lids occasionally. Seek immediate medical attention.

**Skin Contact:** Remove contaminated clothing. Wash affected area with soap and water; apply skin lotions. If skin irritation persists, get medical attention.

**Inhalation:** Remove victim to fresh air at once. Restore and/or support breathing as required. Keep victim warm and at rest. Get medical attention as soon as possible.

**Ingestion:** If conscious, induce vomiting with one tablespoon of ipecac or by touching the back of the throat. Seek medical attention if necessary.

## SECTION 7 - TOXICITY DATA

**Oral:** Methanol: LD<sub>50</sub> (man) - 340 mg/kg.  
Ethyl Alcohol: TD<sub>50</sub> (man) - 50 mg/kg.  
LD<sub>50</sub> (rat) - 7,060 mg/kg.

**Dermal:** Methanol: LD<sub>50</sub> (monkey) - 500 gm/kg.  
Ethyl Alcohol: LD<sub>50</sub> (rabbit) - 20 gm/kg.  
Ethyl alcohol may cause severe skin irritation on prolonged contact.

**Inhalation:** Methanol: LC<sub>50</sub> (human) - 86,000 mg/m<sup>3</sup>.  
Ethyl Alcohol: LC<sub>50</sub> (rat) - 20,000 ppm/10 hr.

**Carcinogenicity:** None of the components of this product is listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

**Target Organ Effects:** Methanol can affect the eyes, skin, central nervous system, and GI tract. Ethanol can cause liver damage and harm to the unborn fetus.

**Other Pertinent Data:** Methanol is a moderate eye irritant when tested on the eyes of rabbits; ethanol is a severe eye irritant when tested on the eyes of rabbits.

## SECTION 8 - SPECIAL PROTECTION INFORMATION

### Personal Protective Equipment

Protective Gloves: Rubber.

Eye Protection: Chemical safety goggles.

Respiratory Protection (Specify Type): Air-supplied mask in confined areas. Only NIOSH- or MSHA-approved equipment should be used.

Other Protective Equipment: Protective clothing to minimize skin contact. Eye bath and safety shower.

### Ventilation

Local Exhaust: To meet TVL requirements.

Mechanical (General): Fans.

Special: Use explosion-proof equipment.

Other: None known.

## SECTION 9 - SPILL, LEAK, AND DISPOSAL PROCEDURES

### Steps to be Taken in Case Material is Released or Spilled:

Remove sources of heat or ignition, or when feasible remove leaking container. Provide ventilation. Contain spill. (Dilution of spill with water to raise flash point may be desirable.) Pick up liquid for recovery or disposal when feasible. Absorb small spills and residue on sand, sawdust, vermiculite or other suitable material.

NOTE: Clean-up personnel need protection against inhalation and liquid contact.

A spill or release of this material may trigger the emergency release reporting requirements under SARA, Title III (40 CFR Part 355) and/or CERCLA (40 CFR, Part 300). State or local reporting requirements may differ from federal requirements. Consult counsel for further guidance on your responsibilities under these laws.

Waste Disposal Methods: Waste material can be burned in a suitable incinerator or disposed of through a licensed waste disposal company. Follow federal, state and local regulations.

Clean Water Act Requirements: Not applicable.

Resource Conservation and Recovery Act (RCRA) Requirements: Defined under 40 CFR 261.21 as exhibiting the characteristic of ignitability (EPA Hazardous Waste No. D001).

## SECTION 10 - REGULATORY INFORMATION

FDA: Not applicable. For industrial use only.

USDA: Not applicable.

CPSC: Label required. Danger. Poison. Flammable. Vapor harmful. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Contains \_\_\_\_\_% methanol.

TSCA: Mixture : CAS# 67-56-1, Methanol; mixture with CAS# 64-17-5, Ethyl Alcohol.

DOT: Regulated.

Proper Shipping Name: Methyl alcohol or Methanol.

Identification No.: UN 1230.

Hazard Class: 3.

Other Pertinent Information: Packing Group II.

Label Required: Flammable, Poison.

RQ is 5000 lbs.

**OSHA:** Class 1B Flammable Liquid.

**EPA:** Superfund Amendments and Reauthorization Act (SARA) Title III: Section 313, Supplier Notification.

<u>Chemical</u>	<u>Chemical Abstract Service Registry No.</u>	<u>Percent by Weight</u>
Methanol	67-56-1	90

This information must be included in all MSDSs that are copied and distributed for this material.

## SECTION 11 - SPECIAL PRECAUTIONS AND COMMENTS

### Precautions to be Taken in Handling and Storing

**WARNING: FLAMMABLE.** Keep away from heat, sparks and open flame. Keep container closed. Use with adequate ventilation. Do not ingest.

Avoid repeated or prolonged skin contact or breathing of vapors. Use with adequate ventilation. Eyewash stations and safety showers should be available in areas of handling and use. Store in tightly closed containers in a cool, dry, well-ventilated, fire-resistant area away from oxidizing agents and away from sources of heat or ignition. Store out of direct sunlight. Protect containers from physical damage. Electrically bond and ground metal containers for transfers to eliminate static sparks. Use non-sparking tools.

### Other Precautions

Provide preplacement medical exams for industrially exposed workers, with emphasis on neurological and visual functions, liver and kidney systems. Provide suitable training to those working with alcohol. Monitor the workplace. Keep records.

Registrations / Certifications: Not applicable.

**Effective Date:** 1/01/00

**Supersedes:** 7/23/97

The symbol "●" indicates revision from previous issue.

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