

G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> Sodium Methylate 25-30%

PRODUCT NUMBER(S)-----> 254100 - 25% Solution, 254110 – 30% Solution

TRADE NAMES AND SYNONYMS--> Sodium Methoxide Solution, Sodium Methanolate Solution

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RECOMMENDED USE: Manufacture of Substances, Laboratory Chemicals

USES ADVISED AGAINST: No information available

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.

**Address: 40 VERONICA AVENUE
SOMERSET, NJ 08873**

Telephone: 1-973-589-1450

Fax: 1-973-589-3072

1.4 Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

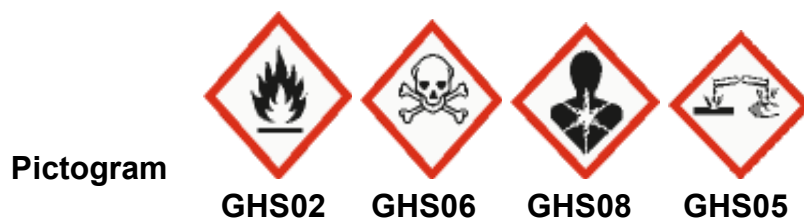
Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Specific target organ toxicity - single exposure (Category 1), organs, H370

2.2 GHS Label elements, including precautionary statements



Signal word **DANGER**

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H370 Causes damage to organs.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin 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.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS:
Reacts violently with water.

3. INGREDIENTS

3.1 SUBSTANCE: Not applicable.

3.2 MIXTURE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Methanol	67-56-1 EC-No.200-659-6 Index-No.603-001-00-X Reg.-No. 01-2119433307-44-XXXX	70-90	Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318 STOT-SE (Category 1), Organs, H370
Sodium Methanolate	124-41-4 EC-No.204-699-5 Index-No. 603-040-00-2 Reg.-No. 01-2119519241-51-XXXX	10-30	Flammable Liquids (Category 1), H228 Self Heating (Category 1), H251 Metal corrosion (Category 1), H290 Acute toxicity, Oral (Category 4), H302 Skin corrosion (Category 1A), H314 Serious eye damage (Category 1), H318

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: SODIUM METHYLATE SOLUTION 25-30%

****FIRST AID: Flush eyes with water for 15 minutes while holding eyelids open to completely flush. Remove contact lenses, if worn, after 1 to 2 minutes of flush. Rinse continuously with water while on the way to a hospital or physician.**

SKIN CONTACT: SODIUM METHYLATE SOLUTION 25-30%

****FIRST AID: Immediately remove contaminated clothing or shoes. Wipe excess from skin and flush with plenty of water for at least 15**

minutes. Use soap if available or follow by washing with soap and water. Do not reuse clothing until thoroughly cleaned. Take victim immediately to hospital. Get medical attention. Contaminated leather articles cannot be decontaminated and should be destroyed to prevent reuse.

INHALATION: SODIUM METHYLATE SOLUTION 25-30%

****FIRST AID:** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

INGESTION: SODIUM METHYLATE SOLUTION 25-30%

****FIRST AID:** Do not give liquids if victim is unconscious or very drowsy. Otherwise give no more than 2 glasses of water and induce vomiting by giving 30cc (2tablespoons) syrup of Ipecac. If Ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of victim's throat. Keep victims head below hips while vomiting. Get medical attention immediately.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Inhalation: Irritation of the mucous membranes, difficulty breathing, sharp pains,

Skin: Contact with liquid may cause irritation. Absorption through skin causes metabolic acidosis and effects eyes and central nervous system as with ingestion.

Eyes: Vapors may cause irritation. High concentrations have been reported to cause violent inflammation of the conjunctiva and epithelial defects on the cornea.

Ingestion: Can cause inebriation, drowsiness, difficulty breathing, severe pain, vomiting, convulsions, unconsciousness, and coma. Effects on the eye from ingestion, include blurred or dimmed vision, dilated perception, photophobia, and optic nerve atrophy. Partial and full blindness can occur. Liver, kidney, heart, stomach, intestinal and pancreatic damage can occur. Death may be due to respiratory failure or circulatory collapse. As little as 15 ml has caused blindness. The usual fatal dose is 16-240 ml.

CHRONIC EFFECTS:

Inhalation: Repeated or prolonged exposure may cause effect as in acute ingestion, headaches, diminution of vision and enlargement of the liver.

Skin: Defatting of the skin resulting in erythema, scaling and dermatitis.

Ingestion: Radiated ingestion may cause visual impairment, blindness and other systemic effects including cancer.

Eyes: Repeated or prolonged contact may cause conjunctivitis.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

****ANTIDOTE**:** The following antidote(s) have been recommended. However, the decision as to whether the severity of poisoning requires administration of any antidote and actual dose required should be made by qualified medical personnel.

METHANOL POISONING:

Give ethanol, 50% (100 proof), 1.5 ml/kg orally initially, diluted to no more than 5% solution, followed by 0.5-1.0 ml/kg every 2 hours orally or intravenously for 4 days in order to reduce metabolism of methanol and to allow time for its excretion. Blood ethanol level should be in the range of 1-1.5 mg/ml (Dreisbach, Handbook of Poisoning, 12th ed.). Antidote should be administered by qualified medical personnel.

Oral or intravenous administration of 4-methylpyrazole inhibits alcohol dehydrogenase and has been used effectively as an antidote for methanol or ethylene glycol poisoning (Ellenhorn and Barceloux, Medical Toxicology).

5. FIRE FIGHTING MEASURES

Flash Point: 11°C (52°F)

LEL %:N.D.

Auto-ignition Temp: N.D.

UEL %:N.D.

UNIFORM FIRE CODE: Flammable Liquid Class 1B

5.1 SUITABLE EXTINGUISHING MEDIA: Dry Chemical--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR

MIXTURE: FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD and MODERATE EXPLOSION HAZARD WHEN EXPOSED TO HEAT, FLAME, OR OXIDIZERS. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK VAPOR-AIR MIXTURES ARE EXPLOSIVE. Keep containers tightly closed.

Flammable liquid; isolate from all sources of ignition. Container areas exposed to direct flame should be cooled with a large quantity of water to prevent weakening of the container structure. Vapors may form explosive mixture with air. Reacts violently with water.

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon oxides and sodium oxides.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Do not enter confined spaces without full bunker gear (helmet with face shield, bunker coats gloves and boots, including a positive pressure NIOSH/MSHA approved positive pressure self-contained breathing apparatus (SCBA)).

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Flammable Liquid; Wear respiratory protection. Avoid breathing vapors, mist or gas. Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. Minimize breathing vapors and skin contact, Clean up personnel should have NIOSH approved positive pressure self-contained breathing apparatus. Beware of vapors accumulating to form explosive concentrations.

Vapors can accumulate in low areas.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill. Large Spills> Evacuate the hazard area of unprotected personnel. Wear appropriate respirator and protective clothing. Shut off source of leak only if safe to do so. Dike and contain. If vapor cloud forms, water fog or chemical foam may be used to suppress, contain run off. Remove with vacuum trucks or pump to storage/salvage vessels.

Methods for disposal:

Soak up residue with an absorbent such as sand or other chemically inert material; do not use clay; place in non-leaking container for proper disposal. Flush area with water to remove trace residue; dispose of flush solution as above.

Small Spills> Take up with sand or other chemically neutral material and place in non-leaking containers; seal tightly for proper disposal.

If spill occurs indoors, turn off air conditioning and/or heat systems to prevent vapors from contaminating entire building.

REPORTABLE QUANTITY (RQ): Methanol – 5000lbs., Sodium Methylate – 1000lbs. 25% Solution – 4000lbs.

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the metropolitan Washington, D. C. area (40 CFR 302.6).

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not take internally. Wash with soap and water before eating, drinking, smoking, personal grooming, or using toilet facilities. Launder contaminated clothing before reuse.

Flammable liquid. Keep liquid and vapor away from heat, sparks and flame. Surfaces that are sufficiently hot may ignite liquid product in the absence of sparks or flame. Take measures to prevent the build-up of electrostatic charge.

Advice on general occupational hygiene:

Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Recommended storage temperature: 15 - 25°C. Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Keep containers closed when not in use. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can result.

CONTAINER WARNINGS: Keep containers closed when not in use. Use only with adequate ventilation. Containers, even those that have been emptied, can contain explosive vapors. Containers, even those that have been emptied, can contain hazardous product residues.

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize drum containers to empty them. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Methanol	67-56-1	70-90	200PPM TWA (ACGIH)

	EC-No.200-659-6		250PPM STEL (ACGIH)
	Index-No.603-001-00-X		200PPM TWA (OSHA)
	Reg.-No. 01-2119433307-44-XXXX		250PPM STEL (OSHA)
			200PPM TWA (NIOSH)
			250PPM STEL (NIOSH)
			25000ppm IDLH
Sodium Methanolate	124-41-4	10-30	N.E.
	EC-No.204-699-5		
	Index-No. 603-040-00-2		
	Reg.-No. 01-2119519241-51-XXXX		

Key: (PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

Avoid breathing vapor. If exposure may or does exceed occupational ACGIH TWA limits use a NIOSH/MSHA approved respirator to prevent overexposure. In accordance with 29CFR 1910.134 use either a full face-piece, atmosphere-supplying respirator or air purifying respirator for organic vapors. For unknown exposure use a NIOSH/MSHA approved full face piece positive pressure supplied air respirator (SCBA).

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove, wash and dry contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.

Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 30 min

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use chemical safety goggles plus full face shield. Emergency shower and eyewash should be in close proximity.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Sodium Methylate Solution 25-30%

APPEARANCE:

Liquid

COLOR:

Colorless

ODOR:

Slight alcohol odor

ODOR THRESHOLD:

No data available

pH:

No data available

MOLECULAR WEIGHT:

54.02 amu

MELTING POINT:

No data available

BOILING POINT:

87°C (189°F)

SPECIFIC GRAVITY:

0.945@25°C (77°F)

DENSITY (25°C):

0.945@25°C (77°F)

VAPOR PRESSURE:

96 mm Hg @ 25°C (77°F)

VAPOR DENSITY:

No data available

WATER SOLUBILITY:

6.69%@68°F

PARTITION COEFFICIENT N-

No data available

OCTANOL/WATER

FLASH POINT:

11°C (52°F)

EVAPORATION RATE (BUTYL ACETATE=1): No data available

UPPER FLAMMABILITY LIMIT:

No data available

LOWER FLAMMABILITY LIMIT:

No data available

AUTO IGNITION TEMPERATURE:

No data available

DECOMPOSITION TEMPERATURE:

No data available

VISCOSITY:

No data available

EXPLOSIVE PROPERTIES:

No data available

OXIDIZING PROPERTIES:

No data available

9.2 OTHER INFORMATION:

No data available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)
Stable under recommended storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixture with air. Reacts violently with water.

HAZARDOUS POLYMERIZATION: May occur (X) Will not occur ()

10.4 CONDITIONS TO AVOID: Heat, Sparks, and Flame. Extremes of temperature and direct sunlight. Exposure to moisture.

10.5 INCOMPATIBLE MATERIALS: Reacts with acids and oxidizing agents

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fire - Carbon Oxides and Sodium Oxides.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Inhalation: Irritation of the mucous membranes, difficulty breathing, sharp pains,

Skin: Contact with liquid may cause irritation. Absorption through skin causes metabolic acidosis and effects eyes and central nervous system as with ingestion.

Eyes: Vapors may cause irritation. High concentrations have been reported to cause violent inflammation of the conjunctiva and epithelial defects on the cornea.

Ingestion: Can cause inebriation, drowsiness, difficulty breathing, severe pain, vomiting, convulsions, unconsciousness, and coma. Effects on the eye from ingestion, include blurred or dimmed vision, dilated perception, photophobia, and optic nerve atrophy. Partial and full blindness can occur. Liver, kidney, heart, stomach, intestinal and pancreatic damage can occur. Death may be due to

respiratory failure or circulatory collapse. As little as 15 ml has caused blindness. The usual fatal dose is 16-240 ml.

CHRONIC EFFECTS:

Inhalation: Repeated or prolonged exposure may cause effect as in acute ingestion, headaches, diminution of vision and enlargement of the liver.

Skin: Defatting of the skin resulting in erythema, scaling and dermatitis.

Ingestion: Radiated ingestion may cause visual impairment, blindness and other systemic effects including cancer.

Eyes: Repeated or prolonged contact may cause conjunctivitis.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	 Oral LD50(Rat)	 Skin LD50(Rabbit) 	Inhalation LC50	
Methanol	 1187-2769mg/kg	 17100mg/kg	 87.6mg/l/6hr	
Sodium Methanolate	 1687mg/kg	 >2000mg/kg		

Methanol –

SKIN CORROSION/IRRITATION : Irritating to skin.

SERIOUS EYE DAMAGE/EYE IRRITATION: Irritating to eyes. Risk of serious damage to eyes.

RESPIRATORY IRRITATION: Irritating to respiratory tract.

RESPIRATORY OR SKIN SENSITIZATION: No data available

MUTAGENIC EFFECTS:

Genotoxicity in vitro - Ames test - S. typhimurium - with and without metabolic activation - negative

Genotoxicity in vitro - in vitro assay - fibroblast - negative

Mutation in mammalian somatic cells.

Genotoxicity in vivo - mouse - male and female - Intraperitoneal - negative

CARCINOGENICITY - IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No data available.

SPECIFIC TARGET ORGAN TOXICITY (STOT-SE) - Single Exposure (Globally Harmonized System)

Causes damage to organs.

SPECIFIC TARGET ORGAN TOXICITY (STOT-RE) - Repeated Exposure (Globally Harmonized System)

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 ADDITIONAL INFORMATION:

AT INCREASED RISK FROM EXPOSURE: Persons with kidney, eye or skin disorders.

Sodium Methanolate –

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Causes severe burns. - 3 min

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Corrosive to eyes - 24 h

RESPIRATORY OR SKIN SENSITIZATION: No data available

MUTAGENIC EFFECTS: No data available

CARCINOGEN STATUS:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No data available

SPECIFIC TARGET ORGAN TOXICITY (STOT-SE) - Single Exposure (Globally Harmonized System): no data available

SPECIFIC TARGET ORGAN TOXICITY (STOT-RE) - Repeated Exposure (Globally Harmonized System): no data available

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL INFORMATION: Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,

12. ECOLOGICAL INFORMATION

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and wildlife officials.

Notify operators of nearby water intakes.

Methanol -

12.1 ACUTE AQUATIC TOXICITY:

Toxicity to fish:

LC50 - *Lepomis macrochirus* (Bluegill) - 15,400.0 mg/L - 96 h

LC50 - *Pimphales promelas* (Fathead Minnow) – 28200 mg/L – 96 h

LC50 - *Oncorhynchus mykiss* (Rainbow Trout) – 19500-20700 mg/L – 96 h

NOEC - *Oryzias latipes* - 7,900 mg/L - 200 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - *Daphnia magna* (Water flea) - > 10,000.00 mg/L - 48 h

Toxicity to algae Growth inhibition:

EC50 - *Scenedesmus capricornutum* (fresh water algae) - 22,000.0 mg/L -96hr

12.2 PERSISTENCE AND DEGRADABILITY: Result: 72 % - rapidly biodegradable

12.3 BIOACCUMULATIVE POTENTIAL: *Cyprinus carpio* (Carp) - 72 d at 20 °C

Bio-concentration factor (BCF): 1.0

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

Chemical Oxygen Demand (COD): 1,420 mg/g

No indication of bioaccumulation potential.

12.4 MOBILITY IN SOIL: Mobile

12.5 RESULTS OF PBT AND vPvB ASSESSMENT: This substance does not meet the criteria for classification as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: Do not allow this material to enter streams, sewers and other waterways.

Sodium Methanolate -

12.1 AQUATIC TOXICITY:

Toxicity to Fish:

LC50 - *Leuciscus idus* (Golden orfe) - 346 mg/l - 48 h

12.2 PERSISTENCE AND DEGRADABILITY: Not readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL: No data available

Biological Oxygen Demand (BOD): No data available

12.4 MOBILITY IN SOIL: No data available

12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No data available

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment, and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID numbers are: Methanol – U154, D001

If the waste is a spent solvent, the appropriate spent solvent code should be used.

DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

Land Transport (DOT)

- 14.1 USDOT ID Number-----> UN1289**
- 14.2 USDOT Shipping Name-----> Sodium Methylate Solutions in alcohol**
- 14.3 USDOT Hazard Classification-----> 3 (Flammable Liquid)**
 - USDOT Label Codes-----> 3, 8**
- 14.4 USDOT Package Code-----> II**
- 14.5 Marine Pollutant-----> No**
- 14.6 Special precautions for user-----> Yes**

Emergency Response Guide-----> 132

Reportable quantity-----> 4000lbs. – 25% Solution

Sea Transport (IMDG)

- 14.1 ID Number-----> UN1289**
- 14.2 Proper shipping name-----> SODIUM METHYLATE SOLUTIONS IN ALCOHOL**
- 14.3 Hazard Classification-----> 3 (Flammable Liquid)**
 - Label Codes-----> 3, 8**
- 14.4 Package Code-----> II**
- 14.5 Marine Pollutant-----> No**
- 14.6 Special precautions for user-----> Yes**
 - EMS-Number-----> F-E, S-C**

Air Transport (IATA)

- 14.1 ID Number-----> UN1289**
- 14.2 Proper shipping name-----> Sodium Methylate Solutions in alcohol**
- 14.3 Hazard Classification-----> 3 (Flammable Liquid)**
 - Label Codes-----> 3, 8**
- 14.4 Package Code-----> II**
- 14.5 Environmental hazard-----> None**
- 14.6 Special precautions for user-----> Yes**

15. REGULATORY INFORMATION

**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION
SPECIFIC FOR THE SUBSTANCE OR MIXTURE:**

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) -Not Listed

**SECTION 313: Toxic Chemicals Listing (40 CFR 372.65 - Listed
Methanol CAS 67-56-1**

**SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard,
Chronic Health Hazard, Fire Hazard**

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

**SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed
Methanol CAS 67-56-1; Reportable Quantity: 5000lbs
Sodium Methanolate CAS 124-41-4; Reportable Quantity: 1000lbs
SECTION 101(14) Reportable Quantity: 25% Solution 4000lbs.**

**Massachusetts Right to Know Components
Methanol CAS 67-56-1
Sodium Methanolate CAS 124-41-4**

**Pennsylvania Right to Know Components
Methanol CAS 67-56-1
Sodium Methanolate CAS 124-41-4**

**New Jersey Right to Know Components
Methanol CAS 67-56-1
Sodium Methanolate CAS 124-41-4**

**California Prop. 65 Components
This product does not contain any chemicals known to State of California to
cause cancer, birth defects, or any other reproductive harm.**

TSCA (Toxic Substance Control Act)

**Methanol CAS 67-56-1 and Sodium Methanolate CAS 124-41-4 are listed on the
TSCA Inventory.**

**15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has not
been carried out for this substance.**

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): **Health=3** **Fire=3** **Reactivity=0**
HMIS (SCALE 0-4): **Health=3** **Fire=3** **Reactivity=0** **PPE=H**

Hazard statement(s) from Section 2 and 3:

H225 Highly flammable liquid and vapor.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H370 Causes damage to organs.

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Prepared by-----> T.G. Fenstermaker Jr.

Acronyms:

ACGIH	-	American Conference of Governmental Industrial Hygienists
AIHA	-	American Industrial Hygiene Association
ANSI	-	American Nation Standards Institute
API	-	American Petroleum Institute
CERCLA	-	Comprehensive Emergency Response, Compensation, and Liability Act
DOT	-	U.S. Department of Transportation
EPA	-	U.S. Environmental Protection Agency
HMIS	-	Hazardous Materials Information System
IARC	-	International Agency For Research On Cancer
MSHA	-	Mine Safety and Health Administration
NFPA	-	National Fire Protection Association
NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	-	Self-Contained Breathing Apparatus
STEL	-	Short-Term Exposure Limit (generally 15 minutes)
TLV	-	Threshold Limit Value
TSCA	-	Toxic Substances Control Act
TWA	-	Time Weighted Average (8hr.)
WHMIS	-	Canadian Workplace Hazardous Materials Information System

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