

FROSTO®
Material Safety Data Sheet
May 2009

FROSTO® is a registered trademark of TANNER SYSTEMS, INC.

1. Product and Company Identification

Trade Name & Synonyms: FROSTO®
Product Name: METHANOL SOLUTION
Chemical Family: ALCOHOL
MSDS Code Number: UN1993
Use: Anti-freeze for compressed air lines. Not for human or animal consumption.

Manufactured by: TANNER SYSTEMS, INC. Website: www.tannersystems.com
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Information Telephone Number: FACTORY, 800-461-6454
Emergency Telephone Number: CHEMTREC, 800-424-9300 (24 Hours)

2. Composition/Information on Ingredients

HAZARDOUS COMPONENTS	C.A.S. NUMBER	EXPOSURE LIMITS	WEIGHT %
Methanol	67-56-1	200 PPM	> 79
Amino Alcohol	124-68-5		< 9
<u>OTHER INGREDIENTS</u>			
Aliphatic Ester			< 11
Colorant			< 1

3. Hazard Identification

EMERGENCY OVERVIEW: Class 3, Flammable, Flashpoint 54° F., 12° C. (Method = TCC)

POTENTIAL ACUTE HEALTH EFFECTS ----

Ingestion: Poisonous if swallowed – may be fatal or cause blindness. Effects of sub lethal doses may be nausea, headache, abdominal pain and visual disturbances.

Inhalation: Inhalation of high airborne concentrations may cause systemic poisoning. Can also irritate mucous membranes, cause headaches, sleepiness, nausea, confusion and digestive and visual disturbances. May worsen conditions such as emphysema or bronchitis.

Eye Contact: High vapor concentration and/or liquid contact with eyes may cause irritation, tearing and burning.

Skin Contact: Rash may occur. May be absorbed through the skin in toxic amounts.

4. First Aid Measures

Ingestion: If swallowed, call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Inhalation: Remove victim to fresh air. Provide oxygen if breathing is difficult. Seek medical attention.

Eye Contact: Flush immediately with gentle running water for a minimum of 15 minutes, ensuring all surfaces and crevices are flushed by lifting lower and upper lids. Obtain medical attention.

Skin Contact: Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation occurs seek medical attention.

Note to Physician: Treat as methanol poisoning.

5. Fire Fighting Measures

Flash Point: 54° (F) 12° (C)

Flash Point Method: Tag Closed Cup

Flammable limits in Air: Lower (%) 6, Upper (%) 36

Flammability Classification: 3

Extinguishing Media: Dry Chemical or CO²

Reactions to Extinguishing Media: Toxic vapors and gases.

Protection for Firefighters: Wear approved protective equipment and clothing.

Procedures for Firefighters: Stay upwind. Isolate and restrict access to area. Do not walk through spilled product. Water spray can be used to reduce the intensity of flames and to dilute spills to non-flammable mixture.

Unusual Fire and Explosion Hazards: Vapor is heavier than air and can travel considerable distance to source of ignition and flashback. Material can burn with little or no visible flames.

6. Accidental Release Measures

Containment Techniques: Eliminate all sources of ignition. Stop leak. For small leaks use absorbent material. Large spills can be contained by diking to prevent spilled materials from entering sewers, confined spaces, drains, waterways or low areas.

Spill/Leak Clean-up Procedures and Equipment: Wear approved protective clothing and gear. Use absorbent material and diking methods.

Evacuation Procedures: Restrict area to protected personnel only.

Reporting Requirements: Comply with Local, State and Federal regulations. Notify appropriate EPA authorities.

7. Handling and Storage

Handling Practices and Warnings: No smoking or open flame in storage, use or handling areas. Eliminate all potential sources of ignition. Ensure proper electrical grounding procedures are in place. Use with adequate ventilation – avoid breathing vapor, contact with eyes, skin and clothing. Wear approved protective equipment. When opening drum give bung no more than one (1) turn and stop. Allow pressure to vent before proceeding.

Storage Practices and Warnings: Store as Flammable Liquid -- in cool, well ventilated area – away from strong oxidizers. Keep containers closed. Use only D.O.T. approved containers.

8. Exposure Control/Personal Protection

Ventilation: Recommended to control employee exposure.

Engineering Controls: Provide ventilation to maintain airborne concentrations below TLV exposure limits.

Routes to Entry, Eye/Face: Protect with approved face shield or goggles.

Routes to Entry, Skin: Wear chemical safety gloves and apparel.

Routes to Entry, Inhalation: If TLV is exceeded use approved air respirator.

General Hygiene and Work Practices: Keep area neat, organized and free of debris. Wash hands often.

Protective Repair and Maintenance of Equipment: Inspect and clean as required.

Other Protective Measures and Equipment: If splashing is a concern wear rubber boots and a rubber apron.

9. Physical and Chemical Properties

<u>Physical State:</u>	Liquid	<u>Color:</u>	Pale Green
<u>Odor:</u>	Slight Alcohol	<u>pH:</u>	Not Available
<u>Boiling Point:</u>	148° F., 64.5° C.	<u>Freezing Point:</u>	-144° F., -97.8° C.
<u>Evaporation Rate (Butyl Acetate = 1):</u>	2.1	<u>Solubility in Water:</u>	100 %
<u>Specific Gravity or Density (H²O=1):</u>	0.7910 at 67° F., 20° C.	<u>Vapor Density (AIR = 1):</u>	1.105 at 58° F., 15° C.

10. Stability and Reactivity

Chemical Stability: Stable

Hazardous polymerization: Will not occur.

Conditions to Avoid: Contact with oxidizers, heat, sparks and flame or any other source of ignition.

Hazardous Products Produced During Decomposition: Formaldehyde. Carbon Dioxide. Carbon Monoxide.

Incompatibility -- Materials to Avoid: Strong oxidizers, acids, bases. May be corrosive to lead and aluminum.

11. Toxicological Information

PRINCIPLE ROUTES OF EXPOSURE

Ingestion: Poisonous if swallowed -- may be fatal or cause blindness. Effects of sub lethal doses may be nausea, headache, abdominal pain and visual disturbances.

Inhalation: Inhalation of high airborne concentrations may cause systemic poisoning. Can also irritate mucous membranes, cause headaches, sleepiness, nausea, confusion and digestive and visual disturbances. May worsen conditions such as emphysema or bronchitis.

Eye Contact: High vapor concentration and/or liquid contact with eyes may cause irritation, tearing and burning.

Skin Contact: Rash may occur. May be absorbed through the skin in toxic amounts.

12. Ecological Information

No data.

13. Disposal Considerations

Regulations: Generators of waste are responsible for waste classification, transport and disposal. Waste materials must be disposed of in accordance with Local, State and Federal regulations. Refer to current EPA regulations.

Empty Containers: Contain hazardous residue – dispose of in accordance with Local, State and Federal regulations.

Note: State or local requirements may differ from federal regulations.

14. Transport Information

U.S.A., D.O.T. ----

Regulated for shipping? Yes

Packing Group: II

Hazard Class: 3

Identification Number: UN1993

Proper Shipping Name: Flammable Liquid, N.O.S. (contains methanol)

National Fire Protection Agency (NFPA) Rating: Health 1, Fire 3, Reactivity 0

Do changes in quantity, packaging, or shipment method change product classification? No

Note: Ship 30 or 55 gal. drum as D.O.T. Class 60; 5 gal. pail as D.O.T. Class 65.

15. Regulatory Information

Federal Regulations: USDOT, OSHA, MSHA, EPA.

Hazard Communication Standard: CRF 1910-1200

International Maritime Dangerous Goods (IMDG): Methanol Solution. Flammable. Hazard Class 3.2

16. Other Information

NOTICE OF SUBSTANCES SUBJECT TO SECTION 313 OF TITLE III OF S.A.R.A.

FROSTO®

contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

<u>SUBSTANCE NAME</u>	<u>C.A.S. NUMBER</u>	<u>% BY WEIGHT</u>
METHANOL	67-56-1	99

Disclaimer: The information contained herein is based on the data available to us and is believed to be correct. However, Tanner Systems, Inc. makes no warranty expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Tanner Systems, Inc. assumes no responsibility for injury from the use of the product described therein.

** END OF MSDS **