



**ROSCO F-1 FLUID**

MSDS No.: ROS003

MSDS Preparation Date: April 28, 2009

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## MATERIAL SAFETY DATA SHEET

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**Product Name** : **ROSCO F-1 FLUID**

**Product Use** : Fog fluid

**Chemical Family** : Aqueous glycol solution

**Supplier's name and address:**

**Rosco Laboratories Inc.**

52 Harbor View Avenue  
Stamford, CT, United States  
06902

**24 Hr. Emergency Tel #** : (800) 424-9300

**HMIS Rating** : \* - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

*Health:* 1      *Flammability:* 0      *Reactivity:* 0

**WHMIS Classes:**



Unregulated

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
			<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Water	7732-18-5	N/Av	N/Av	N/Av	N/Av	N/Av
Triethylene glycol	112-27-6	N/Av	N/Av	N/Av	N/Av	N/Av
Propylene glycol	57-55-6	N/Av	10 mg/m3	N/Av	50 ppm(total) ; 10 mg/m3 (aerosol)	N/Av

\* Note: The ACGIH TLV listed above for the following ingredient(s) is an AIHA WEEL: Propylene glycol

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Clear, colorless liquid. No odor. No special hazards exist with this product. As with any chemical substance, caution and care will prevent unnecessary accidents and safety problems. Read instructions on label before use. **HEALTH CAUTION: Fog from this fluid, like any other common material in an aerosolized state, may be irritating to or cause allergic symptoms in some persons with allergic sensitivity. Persons with active asthma should limit their exposure to the fog.**

#### \*\*\*POTENTIAL HEALTH EFFECTS\*\*\*

**Target organs** : None reported by the manufacturer.

**Routes of exposure** : *Inhalation:* YES    *Skin Absorption:* NO    *Skin & Eyes:* YES    *Ingestion:* YES

**Potential acute health effects** :

*Eyes:* May cause mild transient irritation.

*Skin:* Not a hazard under normal conditions of use.



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*Inhalation:* Inhalation problems are not anticipated. Prolonged exposure to high vapor or aerosol concentrations may cause: Possible transient irritation. Persons suffering from asthma or reactive airway disorders may experience asthma-like effects from exposure to this material.

*Ingestion:* Not an expected route of entry. Ingestion of large amounts may cause nausea, vomiting, diarrhea, as well as depression of the central nervous system.

**Potential chronic health effects**

: None reported by the manufacturer.

**Medical conditions aggravated by overexposure**

: Pre-existing skin and respiratory disorders.

**Additional health hazards**

: None reported by the manufacturer.

**Potential environmental effects**

: None reported by the manufacturer.

**SECTION 4 - FIRST AID MEASURES**

- Inhalation** : Inhalation problems are not anticipated. Remove exposed person to fresh air if adverse effects, such as breathing difficulty arise. If irritation persists, seek prompt medical attention.
- Skin contact** : Flush skin with large amounts of water. Take off contaminated clothing and shoes immediately. Wash affected areas with soap and water. Wash clothing and decontaminate shoes before reuse. Obtain medical attention if symptoms develop and persist.
- Eye contact** : Rinse immediately with plenty of water for at least 15 minutes. Lift upper and lower lids during flushing to ensure complete removal of chemical. If irritation persists, seek prompt medical attention.
- Ingestion** : Do NOT induce vomiting. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of water. Keep at rest.
- Notes For Physician** : Low degree of toxicity. Treat symptomatically.

**SECTION 5 - FIRE FIGHTING MEASURES**

**Fire hazards/conditions of flammability**

: Not flammable under normal conditions of handling.

**Flammability classification (OSHA 29 CFR 1910.1200)**

: Not flammable.

**Flash point**

: Not available.

**Flash point Method**

: Not available.

**Auto-ignition temperature** : Not available.

**Lower flammable limit (% by vol.)**

: Not available.

**Upper flammable limit (% by vol.)**

: Not available.

**Suitable extinguishing media**

: Dry chemical, alcohol foam, carbon dioxide, or water spray. Halogenated compounds.

**Explosion data: Sensitivity to mechanical impact / static discharge**

: Not expected to be sensitive to mechanical impact or static discharge.

**Special fire-fighting procedures/equipment**

: Firefighters should wear full-face, self-contained breathing apparatus (MSHA / NIOSH approved or the equivalent) and impervious clothing.

**Hazardous combustion products**

: Carbon dioxide, carbon monoxide and other unidentified organic compounds.

**Oxidizing properties**

: None known or reported by the manufacturer.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Personal precautions** : Wear suitable protective clothing (see Section 8).

**Environmental precautions** : If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.



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- Spill response/cleanup** : Evacuate personnel to safe areas. Restrict access to area until completion of clean-up. Contain spilled material. Recover free liquid or cover with inert absorbent material and place into appropriate container for disposal. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
- Containment** : Recover free liquid or cover with inert absorbent material and place into appropriate container for disposal. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

**SECTION 7 - HANDLING AND STORAGE**

- Safe Handling procedures** : Do not ingest. Do not inhale aerosol. Avoid contact with skin and eyes. Keep containers tightly closed when not in use. Use with adequate ventilation. Avoid breathing vapors.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Inspect periodically for damage or leaks. Do not store near any incompatible materials (see Section 10). Do not freeze. Keep container tightly closed when not in use. Keep away from children. Do not store near food, foodstuffs, drugs, or potable water supplies.
- Incompatible materials** : Strong oxidizing agents and acids.
- Special packaging materials** : Liquid-proof glass, plastic or non-corrodible metal containers are recommended.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

- Ventilation and engineering measures** : General mechanical ventilation is sufficient for use with this product. Local ventilation is recommended if the product is misted or used in a confined space, or if the TLV is exceeded.
- Respiratory protection** : None required under normal conditions. If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised.
- Skin protection** : None required under normal conditions. Gloves of natural rubber or polyvinyl chloride-coated gloves are recommended.
- Eye / face protection** : None required under normal conditions. If splashing might occur, wear eye protection such as safety glasses with side shields.
- Other protective equipment** : Emergency showers and eyewash facilities should be nearby.
- General hygiene considerations** : Wash hands before breaks and immediately after handling the product. Wash hands before breaks and at the end of workday.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Physical state** : Liquid.
- Appearance** : Clear, colorless liquid.
- Odor** : No odor.
- Odor threshold** : Not available.
- pH** : 7.0 (approximately)
- Boiling point** : 100-243.3 °C
- Specific gravity** : 1.12(approximately)
- Melting/Freezing point** : Not available.
- Coefficient of water/oil distribution** : Not available.
- Vapor pressure (mmHg @ 20° C / 68° F)** : 8.40
- Solubility in water** : soluble
- Vapor density (Air = 1)** : Not available.
- Evaporation rate (n-Butyl acetate = 1)** : 0.01
- Volatile organic Compounds (VOC's) (lbs/gal; g/l)** : Not available.
- Volatiles (% by weight)** : Not available.
- Viscosity** : Not available.
- Special Remarks On Fire Hazards** : Not flammable under normal conditions of use.



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**SECTION 10 - REACTIVITY AND STABILITY DATA**

- Stability and reactivity** : Stable under normal conditions.
- Hazardous polymerization** : Will not occur.
- Conditions to avoid** : Combination with strong oxidizers and/or acids may cause explosive decomposition.
- Materials To Avoid And Incompatibility** : Strong oxidizing agents and acids.
- Hazardous decomposition products** : Carbon monoxide, carbon dioxide, aldehydes, ketones, and hydrocarbons.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

<u>Ingredients</u>	<u>LC<sub>50</sub>(4hr)</u> <u>inh, rat</u>	<u>LD<sub>50</sub></u>	
		<u>oral</u>	<u>dermal</u>
Water	N/Av	>90 mL/kg (rat)	N/Av
Triethylene glycol	N/Av	12,800 mg/kg (rat)	22,460 mg/kg (rabbit)
Propylene glycol	N/Av	20,000 mg/kg (rat)	20,800 mg/kg (rabbit)

- Toxicological data** : Low order of toxicity for normal industrial handling.
- Carcinogenic status** : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive effects** : Not expected to have other reproductive effects.
- Teratogenicity** : Not expected to be a teratogen.
- Mutagenicity** : Not expected to be mutagenic in humans.
- Reproductive Effects** : Not expected to have other reproductive effects.
- Irritancy** : Direct contact may cause mild eye irritation. Possible inhalation irritant.
- Sensitization to material** : Not expected to be a sensitizer.
- Synergistic materials** : None reported by the manufacturer.

**SECTION 12 - ECOLOGICAL INFORMATION**

- Environmental effects** : None known or reported by the manufacturer. However, it is recommended not to allow the material to enter the environment.
- Important environmental characteristics** : Expected to be ultimately biodegradable
- Ecotoxicological** : Not expected to be harmful to aquatic organisms. The bioconcentration potential is low.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

- Handling for Disposal** : See Section 7 (Handling and Storage) section for further details.
- Methods of Disposal** : Contact waste disposal services. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules. Do not reuse container except for storage and shipment of the original product.

**SECTION 14 - TRANSPORTATION INFORMATION**

<u>Regulatory Information</u>	<u>UN Number</u>	<u>Shipping Name</u>	<u>Class</u>	<u>Packing Group</u>	<u>Label</u>
TDG	None	Not regulated.	Not regulated	-None-	



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<b>TDG Additional information</b>	None.				
49CFR/DOT	None	Not regulated.	Not regulated	-None-	
<b>49CFR/DOT Additional information</b>	None.				
ICAO/IATA	None	Not regulated.	Not regulated	-None-	
<b>ICAO/IATA Additional information</b>	None.				
IMDG	None	Not regulated.	Not regulated	-None-	
<b>IMDG Additional information</b>	None.				

**SECTION 15 - REGULATORY INFORMATION**

**US Federal Information:**

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

SARA Section 313: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical Constituents above de minimus concentrations.

**US State Right to Know Laws:**

California Proposition 65: To the best of our knowledge, this product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

**Canadian Regulations:**

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

Canadian WHMIS Classification: Not regulated.

***This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.***

**SECTION 16 - OTHER INFORMATION**

**Legend**

- : ACGIH: American Conference of Governmental Industrial Hygienists
- IARC: International Agency for Research on Cancer
- N/Ap: not applicable
- N/Av: not available
- NIOSH: National Institute of Occupational Safety and Health
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration

**References**

- : Information obtained from sources including original supplier's Material Safety Data Sheet, and references including RTECS and CCOHS Cheminfo.



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