

MATERIAL SAFETY DATA SHEET



1. PRODUCT AND COMPANY IDENTIFICATION:

Product Name: Fire Rescue Fog SM Smoke Fluid

Product Use: Artificial smoke for use during non-fire obstruction training

Company Name: Froggys Fog LLC

Company Address: 302 Rutherford Lane, Columbia, TN 38401

Company Phone: 615-469-4906

2. COMPOSITION / INFORMATION ON INGREDIENTS:

CAS #: 57-55-6, 25322-68-3, 7732-18-5

(See Section 8, "Exposure Controls/Personal Protection", for exposure guidelines.)

3. HAZARDS IDENTIFICATION:

NFPA Code: Health-1, Flammability-1, Reactivity-0

HMIS Code: Health-1, Flammability-1, Reactivity-0

EMERGENCY OVERVIEW: This product has been evaluated and does not require any hazard warning on the label under OSHA criteria

POTENTIAL HEALTH EFFECTS:

EYE CONTACT - ACUTE: May cause slight transient (temporary) irritation to sensitive individuals.

SKIN CONTACT - ACUTE: May cause mild skin irritation to sensitive individuals.

INGESTION: Single dose oral toxicity low. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: No significant health hazards identified.

4. FIRST AID MEASURES:

EYE: Flush immediately with large amounts of water. If irritation occurs, call a physician.

SKIN: Wash exposed area of skin with soap and water. If skin irritation or an allergic reaction occurs, get medical attention.

INGESTION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling. If symptomatic, call a physician or poison control center promptly.

INHALATION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling. If adverse effects occur, remove to uncontaminated area. Get medical attention if symptoms persist.

5. FIRE FIGHTING MEASURES:

FLASH POINT: 118°C (244.4°F) minimum

METHOD USED: Cleveland Open Cup

FLAMMABLE LIMITS:

LEL (% vol. in air): Not determined.

UEL (% vol. in air): Not determined.

AUTOIGNITION TEMPERATURE: 419°C (786.2°F).

FLAMMABILITY CLASSIFICATION: Slight hazard. Material must be preheated before ignition will occur (OSHA Class IIIB).

EXTINGUISHING MEDIA: Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, foam, steam) or water fog. Do not use streams of water as this will

scatter the liquid and spread the fire. A water spray may be used to keep fire-exposed containers and surroundings cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May create dense smoke during combustion. Mild fire hazard when heated above its flash point.

FIREFIGHTING EQUIPMENT: Firefighters should wear full face, self-contained, including a positive pressure self-contained breathing apparatus.

HAZARDOUS PRODUCTS DECOMPOSITION/COMBUSTION: Decomposition of this product under open fire conditions can produce proplonaldehyde, carbon dioxide and carbon monoxide. Incomplete burning can produce carbon monoxide and/or carbon dioxide and other toxic gases.

6. ACCIDENTAL RELEASE MEASURES:

Remove mechanically or contain on an absorbent material such as dry sand or earth. Remove all sources of ignition. Dike around spilled material.

7. HANDLING AND STORAGE:

VENTILATION: Good general ventilation should be sufficient for most conditions

RESPIRATORY PROTECTION: When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator. Organic vapor cartridges with particulate pre-filters can be used to decrease exposure.

STORAGE: Store in a cool, well-ventilated area in sealed containers. Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EYE: None required; however, use of eye protection is good industrial practice.

SKIN: None required; however, use of protective gloves/clothing is good industrial practice.

INHALATION: Avoid breathing mist. If ventilation is inadequate, use an NIOSH/MSHA certified respirator that will protect against dust/mist.

ENGINEERING CONTROLS: Control airborne concentrations below the exposure guidelines.

EXPOSURE GUIDELINES:

Trace quantities of ethylene oxide (EO) may be present in this product. While these trace quantities accumulate in head space areas of storage and transport vessels, they are not expected to create a condition which will result in EO concentrations greater than 0.5 ppm (8-hour TWA) in the breathing zone of the workplace for appropriate applications. OSHA has established a permissible exposure limit of 1.0 ppm for 8-hour TWA for EO (CFR Part 1910.1047 or Title 29)

9. CHEMICAL AND PHYSICAL PROPERTIES:

APPEARANCE AND ODOR: Colorless, Odorless, Viscous Liquid

pH: Not determined.

VAPOR PRESSURE: < 14.33 mmHg @ 20°C (68°F)

VAPOR DENSITY (Air=1): >1

BOILING POINT: 193°C.

MELTING POINT: Not applicable.

SOLUBILITY: Complete

SPECIFIC GRAVITY: ~1.0446 @ 25°C (77°F)

10. STABILITY AND REACTIVITY:

STABILITY: Stable under normal storage conditions. Product degrades when stored at elevated temperatures in presence of air. Degradation occurs rapidly at temperature approaching the flash point.

MATERIALS TO AVOID: Avoid oxidizing materials.

HAZARDOUS DECOMPOSITION: Proplonaldehyde and carbon monoxide in the presence of limited oxygen in a fire situation.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION:

CARCINOGENICITY:

ACGIH – NO

IRAC – NO

NTP – NO

OSHA – NO

TOXICOLOGICAL – CHRONIC

No data available

TOXICOLOGICAL – ACUTE

No data available

12. ECOLOGICAL INFORMATION:

Ecological testing has not been conducted on this product.

13. DISPOSAL INFORMATION:

Disposal must be in accordance with applicable federal, state, or local regulations.

14. TRANSPORTATION INFORMATION:

U.S. Department of Transportation: Not regulated.

International Information:

Canadian Transportation of Dangerous Goods: Not regulated.

15. REGULATORY INFORMATION:

CERCLA Sections 102A/103 Hazardous Substances (40 CFR Part 302.4): Not reportable.

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR Part 355): Not regulated.

SARA Title III Sections 311/312 Hazardous Categorization: Not to have met any hazard category

SARA Title III Section 313 (40 CFR Part 372): Not regulated.

U.S. Inventory (TSCA): Listed on inventory. All components comply with TSCA.

OSHA Hazard Communication Standard: Listed by ACGIH. Listed by OSHA.

16. PREPERATION INFORMATION

DATE: December 18, 2002 MSDS

PREPARED BY: Froggys Fog LLC

CONTACT: Adam Pogue, Froggys Fog LLC, 615-469-4906

Disclaimer

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