

MATERIAL SAFETY DATA SHEET



1. PRODUCT AND COMPANY IDENTIFICATION:

Product Name: Fire Rescue Fog Smoke Fluid

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

WHMIS/OSHA Class: Not controlled

T.D.G./DOT Classification: Not regulated

Company Name: Froggys Fog LLC

Company Address: 302 Rutherford Lane, Columbia, TN 38401

Company Phone: 615-469-4906

2. COMPOSITION / INFORMATION ON INGREDIENTS:

CAS #: Mixture of 56-81-5, 57-55-6, 7732-18-5

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

3. HAZARDS IDENTIFICATION:

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

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

Emergency overview: Contact with liquid may cause eye and skin irritation.

Potential short term health effects:

Routes of exposure: Eye, Skin contact, Inhalation, Ingestion.

Eyes: May cause irritation.

Skin: May cause irritation.

Inhalation: May cause respiratory tract irritation.

Ingestion: May cause stomach distress, nausea or vomiting.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

4. FIRST AID MEASURES:

Eye contact: Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.

Skin contact: Flush with cool water. Wash with soap and water. Obtain medical attention if irritation develops or persists.

Inhalation: If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion: Do not induce vomiting. Rinse mouth with water, and then drink one or two glasses of water.

Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

General advice: If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES:

Flammable properties: Not flammable by WHMIS/OSHA criteria.

Extinguishing media

Suitable extinguishing media: Dry chemical. Alcohol foam. Carbon dioxide.

Unsuitable extinguishing media: Not available

Protection of firefighters

Specific hazards arising from the chemical: Not available

Protective equipment for firefighters: Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products: May include and are not limited to: Oxides of carbon.

Explosion data

Sensitivity to mechanical impact: Not available

Sensitivity to static discharge: Not available

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions: Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods for containment: Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. HANDLING AND STORAGE:

Handling Use good industrial hygiene practices in handling this material.

Storage Keep out of reach of children. Store in a closed container away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Exposure limits:

Ingredient(s)

56-81-5

Exposure Limit

ACGIH-TLV: TWA: 10 mg/m³, Mist: 10 mg/m³

OSHA-PEL: TWA: 15 mg/m³

57-55-6

ACGIH-TLV: Not established

OSHA-PEL: Not established

7732-18-5

ACGIH-TLV: Not established

OSHA-PEL: Not established

Engineering controls: General ventilation normally adequate.

Personal protective equipment

Eye / face protection Safety glasses recommended.

Hand protection If there is constant skin contact, rubber gloves are recommended.

Skin and body protection As required by employer code.

Respiratory protection Not normally required if good ventilation is maintained.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. CHEMICAL AND PHYSICAL PROPERTIES:

Appearance: Clear.

Color: Colorless

Form: Liquid

Odor: No Odor

Odor threshold: Not available

Physical state: Liquid

pH: Neutral

Melting point: Not available

Freezing point: Not available

Boiling point: Not available

Flash point: > 121 °C (> 249.80 °F) Tag Closed Cup

Evaporation rate: Not available

Flammability limits in air, lower, % by volume: Not available

Flammability limits in air, upper, % by volume: Not available

Vapor pressure: Not available

Vapor density: > 1 (Air = 1)

Specific gravity: ~1.083 (H₂O = 1)

Octanol/water coefficient: Not available

Solubility (H₂O): Complete

Auto-ignition temperature: Not available

Viscosity: Not available

Percent volatile: Not available

10. STABILITY AND REACTIVITY:

Chemical stability: Stable.

Conditions to avoid: Do not mix with other chemicals.

Incompatible materials: Caustics. Acids. Oxidizers.

Hazardous decomposition products: May include and are not limited to: Oxides of carbon when heated to decomposition.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION:

Component analysis - LC50

Ingredient(s)

56-81-5

57-55-6

7732-18-5

LC50

> 2.28 mg/L rat

Not available

Not available

Component analysis - Oral LD50

Ingredient(s)

56-81-5

57-55-6

7732-18-5

LD50

12600 mg/kg rat

13300 mg/kg rat

14500 mg/kg rat

Effects of acute exposure

Eye: May cause irritation.

Skin: May cause irritation.

Inhalation: May cause respiratory tract irritation.

Ingestion: May cause stomach distress, nausea or vomiting.

Sensitization: Non-hazardous by WHMIS/OSHA criteria.

Chronic effects: Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity: Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity: Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects: Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity: Non-hazardous by WHMIS/OSHA criteria.

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:

US Federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA

Hazard Communication Standard, 29 CFR 1910.1200.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical: No

CERCLA (Superfund) reportable quantity: None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories:

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

Section 302 extremely hazardous substance: No

Section 311 hazardous chemical: No

Clean Air Act (CAA): Not available

Clean Water Act (CWA): Not available

Safe Drinking Water Act (SDWA): Not available

Drug Enforcement Agency (DEA): Not available

Food and Drug Administration (FDA): Not available

WHMIS status: Not Controlled

State regulations: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - Massachusetts - Right To Know List: 56-81-5 Present (mist)

U.S. - Minnesota - Hazardous Substance List: 56-81-5 Present

U.S. - Pennsylvania - RTK (Right to Know) List: 56-81-5 Present

U.S. - Rhode Island - Hazardous Substance List: 56-81-5 Toxic; Flammable

Inventory name:

Country(s) or region Inventory name on inventory (yes/no)*

United States & Puerto Rico

Non-Domestic Substances List (NDSL): No

Toxic Substances Control Act (TSCA) Inventory: Yes

Canada Domestic Substances List (DSL): Yes

16. PREPERATION INFORMATION

DATE: January 25, 2008

PREPARED BY: Froggys Fog LLC

CONTACT: 615-469-4906

Disclaimer

This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.