

## Material Safety Data Sheet

### I. IDENTIFICATION

PRODUCT NAME: Standard, Global, Long Lasting, Quick Dissipating, Extra Quick Dissipating, Molecular, Neutron Haze, C-Beam (Regular Haze)  
CAS #: Mixture  
PRODUCT USE: Theatrical Fog or Theatrical Haze

### II. HAZARDS IDENTIFICATION

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 minimal irritation of areas exposed to liquid.
INHALATION	No evidence of adverse effects from exposure to recommended levels. Should continuous exposure to high concentrations of fog be required professionally (i.e. fire training), a canister type particle mask designed for 10 to 20 micron filtration should be used.
INGESTION	No evidence of adverse effect for low dose. May cause nausea and vomiting in higher dosage.
TARGET ORGANS	Eyes. Skin.
CHRONIC EFFECTS	No evidence of adverse effects from available information.

### III. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #
Glycerol	56-81-5
Dipropylene glycol	25265-71-8
Propylene glycol	000057-55-6
Deionized water	7732-18-5

### IV. FIRST AID MEASURES

#### FIRST AID PROCEDURES

EYE CONTACT	Immediately flush with cool water. Seek medical attention if irritation persists.
SKIN CONTACT	Flush with cool water. Wash with soap and water. Seek medical attention if irritation persists.
INHALATION	If irritation occurs move to fresh air. Seek medical attention if irritation persists.

INGESTION	Rinse mouth with water. Seek medical attention if symptoms occur.
NOTES TO PHYSICIAN	Treatment of overexposure should be directed at the control of symptoms and the clinical condition.
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.

## V. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES	Not flammable by WHMIS/OSHA criteria.
HAZARDOUS COMBUSTION PRODUCTS	May include and are not limited to: Oxides of carbon.

## VI. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	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, or confined areas.
METHODS FOR CLEANING UP	Before attempting clean up refer to hazard data given above. Small spills should be flushed with large quantities of water. Larger spills should be collected for disposal. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for assistance.

## VII. 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.

## VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMITS

<b>Ingredient(s)</b>	<b>Exposure Limits</b>
Glycerol	<b>ACGIH-TLV</b> TWA: 10mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 15mg/m <sup>3</sup> Mist: 5 mg/m <sup>3</sup>
Dipropylene glycol	<b>ACGIH-TLV</b> Not Established <b>OSHA-PEL</b> Not Established
Propylene glycol	<b>ACGIH-TLV</b> Not Established <b>OSHA-PEL</b> Not Established
Deionized water	<b>ACGIH-TLV</b> Not Established <b>OSHA-PEL</b> 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.

##### 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 immediately after handling the product.

## IX. PHYSICAL & CHEMICAL 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	> 187 °C (> 370 °F)
FLASH POINT	> 103 °C (> 217.40 °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	< 1 @ 20°C (68°F)
VAPOR DENSITY	< 4.6 (Air = 1)
SPECIFIC GRAVITY	< 1.3 @ 20°C (68°F) (H2O = 1)
OCTANOL/WATER COEFFICIENT	Not Available
SOLUBILITY (H2O)	Complete
AUTO-IGNITION TEMPERATURE	Not Available
VISCOSITY	Water Thin
PERCENT VOLATILE	Not Available

## X. CHEMICAL STABILITY & REACTIVITY INFORMATION

CHEMICAL STABILITY	Stable
CONDITIONS TO AVOID	Do not mix with other chemicals
INCOMPATIBLE MATERIALS	Strong oxidizing agents. Acids. Bases
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.

## XI. TOXICOLOGICAL INFORMATION

### COMPONENT ANALYSIS – LC50

Ingredient(s)	LC50
Glycerol	> 570 mg/m <sup>3</sup> Inhalation Rat 1 h
Dipropylene glycol	Not Available
Propylene glycol	Not Available
Deionized water	Not Available

### COMPONENT ANALYSIS – ORAL LD50

Ingredient(s)	LD50
Glycerol	12600 mg/kg rat 4090 mg/kg mouse
Dipropylene glycol	> 5.00 g/kg rat
Propylene glycol	20000-34000 mg/kg rat
Deionized water	14500 mg/kg rat

### EFFECTS OF ACUTE EXPOSURE

EYE	May cause irritation.
SKIN	May cause minimal irritation of areas exposed to liquid.
INHALATION	No evidence of adverse effects from exposure to recommended levels.
INGESTION	No evidence of adverse effect for low dose. May cause nausea and vomiting in higher dosage.

SENSITIZATION	Not Available
CHRONIC EFFECTS	Not Available
CARCINOGENICITY	Not Available
MUTAGENICITY	Not Available
REPRODUCTIVE EFFECTS	Not Available
TERATOGENICITY	Not Available

## XII. ECOLOGICAL INFORMATION

ECOTOXICITY                      Components of this product have been identified as having potential environmental concerns.

### Ecotoxicity - Freshwater Fish Species Data

Propylene glycol    000057-55-6              LC50 for rainbow trout (*Oncorhynchus mykiss*): 44000 mg/L  
LC50 for fathead minnow (*Pimephales promelas*): 46500-54900 mg/L  
LC50 for guppy (*Poecilia reticulata*): >10000 mg/L

### Ecotoxicity - Water Flea Data

Propylene glycol    000057-55-6              LC50 for water flea (*Daphnia magna*): 4850-34400 mg/L

ENVIRONMENTAL EFFECTS	None or no information
AQUATIC TOXICITY	None or no information
PERSISTENCE / DEGRADABILITY	None or no information
BIOACCUMULATION / ACCUMULATION	None or no information
PARTITION COEFFICIENT	None or no information
MOBILITY IN ENVIRONMENTAL MEDIA	None or no information
CHEMICAL FATE INFORMATION	None or no information

### **XIII. DISPOSAL CONSIDERATIONS**

WASTE CODES	Not Available
DISPOSAL INSTRUCTIONS	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. Dispose of according to all federal, state and local applicable regulations. Where possible recycling is preferred to disposal or incineration
WASTE FROM RESIDUES / UNUSED PRODUCTS	Dispose of according to all federal, state and local applicable regulations. Where possible recycling is preferred to disposal or incineration
CONTAMINATED PACKAGING	Dispose of according to all federal, state and local applicable regulations. Where possible recycling is preferred to disposal or incineration

### **XIV: TRANSPORT INFORMATION**

DEPARTMENT OF TRANSPORTATION (DOT)	Not regulated as dangerous goods.
TRANSPORTATION OF DANGEROUS GOODS (TDG)	Not regulated as dangerous goods.

### **XV: 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.

OSHA 29 CFR 1910.1200 HAZARDOUS CHEMICAL No

SARA

SECTION 311 HAZARD CATEGORIES	Acute Hazard – No Chronic Hazard – Yes Fire Hazard – No Pressure Hazard – No Reactivity Hazard – No
SECTION 302 – EXTREMELY HAZARDOUS	No

SECTION 313 – TOXIC CHEMICAL No

CERCLA / DOT HAZARDOUS SUBSTANCES No

TSCA INVENTORY STATUS Not subject or exempt from TSCA Inventory

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

**US – Pennsylvania – Right to Know List**

Glycerol	56-81-5	Listed
Propylene glycol	000057-55-6	Listed

**CANADIAN REGULATIONS**

WHMIS This product is not a “Controlled Product” under WHMIS.

CANADIAN INGREDIENT DISCLOSURE LIST (IDL) Ingredients are not listed or exempt.

**XVI: OTHER INFORMATION**

**DISCLAIMER** Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.