

## 1. Product and Company Identification

<b>Product identifier</b>	<b>Molecular Fog Fluid</b>
<b>Other means of identification</b>	Not available
<b>Recommended use</b>	Theatrical Fog
<b>Recommended restrictions</b>	None known.
<b>Manufacturer information</b>	Ultratec Special Effects 1960 Blue Heron Drive London, ON N6H 5L9 CA Phone: 1 -519-659-7972 Toll Free Phone: 1-800-388-0617 Emergency Number: ChemTel: 1-800-255-3924
<b>Supplier</b>	See above.

## 2. Hazards Identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.
<b>WHMIS 2015 defined hazards</b>	Not classified
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	The mixture does not meet the criteria for classification.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)</b>	None known
<b>WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)</b>	None known
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	Not applicable.

## 3. Composition/Information on Ingredients

### Mixture

Chemical name	Common name and synonyms	CAS number	%
1,2-Propanediol		57-55-6	80-100*

**Composition comments** US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.  
\*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First Aid Measures

<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Skin contact</b>	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation develops or persists.
<b>Eye contact</b>	Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.

<b>Ingestion</b>	Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious or is convulsing.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	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. Avoid contact with eyes and skin. Wear rubber gloves and safety glasses with side shields. Keep out of reach of children.

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## 5. Fire Fighting Measures

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<b>Suitable extinguishing media</b>	Alcohol foam. Carbon dioxide. Water Fog. Dry chemical.
<b>Unsuitable extinguishing media</b>	Not available.
<b>Specific hazards arising from the chemical</b>	Firefighters should wear a self-contained breathing apparatus.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self-contained breathing apparatus.
<b>Fire-fighting equipment/instructions</b>	Cool containers with flooding quantities of water until well after fire is out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon.

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## 6. Accidental Release Measures

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<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

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## 7. Handling and Storage

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<b>Precautions for safe handling</b>	Avoid prolonged exposure. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

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## 8. Exposure Controls/Personal Protection

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### Occupational exposure limits

#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
1,2-Propanediol (CAS 57-55-6)	TWA	155 mg/m <sup>3</sup>	Vapor and aerosol.
		10 mg/m <sup>3</sup>	Aerosol.
		50 ppm	Vapor and aerosol.

#### US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
1,2-Propanediol (CAS 57-55-6)	TWA	10 mg/m <sup>3</sup>	Aerosol.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.
<b>Appropriate engineering controls</b>	General ventilation normally adequate.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Safety glasses recommended.
<b>Skin protection</b>	
<b>Hand protection</b>	If there is constant skin contact, rubber gloves are recommended.
<b>Other</b>	As required by employer code.
<b>Respiratory protection</b>	Not normally required if good ventilation is maintained. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Clear
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	no odour
<b>Odor threshold</b>	Not available.
<b>pH</b>	Neutral
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	(H <sub>2</sub> O = 1)
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Flash point</b>	> 217.4 °F (> 103.0 °C) Tag Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	> 1 (Air = 1)
<b>Relative density</b>	1.04
<b>Solubility(ies)</b>	Complete
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

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## 10. Stability and Reactivity

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<b>Reactivity</b>	May react with incompatible materials.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Oxidizers.

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**11. Toxicological Information**

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

**Information on likely routes of exposure**

- Ingestion** May cause stomach distress, nausea or vomiting.
- Inhalation** No adverse effects due to inhalation are expected.
- Skin contact** No adverse effects due to skin contact are expected.
- Eye contact** No adverse effects due to eye contact are expected.

**Symptoms related to the physical, chemical and toxicological characteristics** There are no hazards associated with this product in normal use.

**Information on toxicological effects**

**Acute toxicity**

Components	Species	Test Results
1,2-Propanediol (CAS 57-55-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, 24 Hours, ECHA 20800 mg/kg, Millipore
<i>Inhalation</i>		
LC50	Rabbit	> 317042 mg/m <sup>3</sup> , 2 Hours, ECHA
<i>Oral</i>		
LD50	Dog	19 g/kg, HSDB
	Guinea pig	19700 mg/kg, ECHA 18.4 g/kg, HSDB
	Mouse	24900 mg/kg, ECHA 23900 mg/kg, HSDB 23.9 g/kg, HSDB
	Rabbit	22.8 g/kg, CCOHS 18 g/kg, HSDB
	Rat	19.4 - 36 g/kg, Millipore 22000 mg/kg, ECHA 21 g/kg, CCOHS

**Skin corrosion/irritation** Not expected to be a primary skin irritant. Prolonged skin contact may cause temporary irritation.

- Exposure minutes** Not available.
- Erythema value** Not available.
- Oedema value** Not available.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

- Corneal opacity value** Not available.
- Iris lesion value** Not available.
- Conjunctival reddening value** Not available.
- Conjunctival oedema value** Not available.
- Recover days** Not available.

**Respiratory or skin sensitization**

- Respiratory sensitization** Not available.
- Skin sensitization** This product is not expected to cause skin sensitization.

**Mutagenicity** Non-hazardous by WHMIS/OSHA criteria.

**Carcinogenicity** Non-hazardous by WHMIS/OSHA criteria.

## US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

<b>Reproductive toxicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.

## 12. Ecological Information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### Ecotoxicological data

Components		Species	Test Results
1,2-Propanediol (CAS 57-55-6)			
Crustacea	EC50	Daphnia	10000 mg/L, 48 Hours
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	710 mg/L, 96 hours

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Mobility in general** Not available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal Considerations

<b>Disposal instructions</b>	Review federal, state/provincial, and local government requirements prior to disposal. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport Information

**Transport of Dangerous Goods (TDG) Proof of Classification** Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

### U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

### Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

## 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

### Greenhouse Gases

Not listed.

### Precursor Control Regulations

Not regulated.

**WHMIS 2015 Exemptions** Not applicable

**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.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Not listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
Not listed.

**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

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
Not regulated.

**US 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 - Minnesota Haz Subs: Listed substance**  
1,2-Propanediol (CAS 57-55-6) Listed.

**US - New Jersey RTK - Substances: Listed substance**  
1,2-Propanediol (CAS 57-55-6)

**US - Texas Effects Screening Levels: Listed substance**  
1,2-Propanediol (CAS 57-55-6) Listed.

**US. Massachusetts RTK - Substance List**  
Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**  
Not regulated.

**US. Pennsylvania Worker and Community Right-to-Know Law**  
1,2-Propanediol (CAS 57-55-6)

**US. Rhode Island RTK**  
1,2-Propanediol (CAS 57-55-6)

**US. California Proposition 65**  
Not Listed.

**Inventory status**

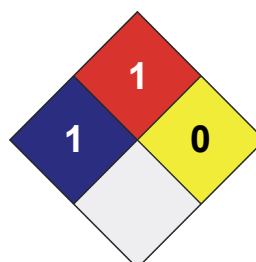
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information**

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

<b>HEALTH</b>	/ 1
<b>FLAMMABILITY</b>	1
<b>PHYSICAL HAZARD</b>	0
<b>PERSONAL PROTECTION</b>	X



**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available. 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.

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**Prepared by**

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**Other information**

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.