



**Bullex Smoke Liquid &  
Bullex Smoke Simulation Fluid  
Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 /  
Rules and Regulations

**Bullex**  
20 Corporate Circle  
Albany, NY 12203  
United States  
Phone: (888) 428-5539  
  
Revision Date: 5/3/2016

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY**

**1.1. Product Identifier**

**Product Form:** Mixture

**Product Name:** BULLEX SMOKE LIQUID & BULLEX SMOKE SIMULATION FLUID

**1.2. Intended Use of the Product**

**Use of the Substance/Mixture:** Smoke liquid

**1.3. Name, Address, and Telephone of the Responsible Party**

**Bullex, Inc.**

20 Corporate Circle  
Albany, NY United States  
12203  
www.bullex.com

**1.4. Emergency Telephone Number**

(888) 428-5539  
(31) 30-2748888

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1. Classification of the Substance or Mixture**

**Classification (GHS-US)**

Not classified

**2.2. Label Elements**

**GHS-US Labeling**

No labeling required

**2.3. Other Hazards**

**Other Hazards Not Contributing to the Classification:** Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

**2.4. Unknown Acute Toxicity (GHS-US)**

No data available

**EMERGENCY OVERVIEW**

Opaque liquid. Faint 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:** Smoke from this liquid, like any other common material in an aerosolized state, may be irritating to or cause allergic symptoms in some persons with allergenic sensitivity or those with other respiratory conditions. Persons with asthma or other respiratory conditions should avoid exposure to the smoke.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1. Substance**

Not applicable

**3.2. Mixture**

Name	Product Identifier	EG #	% (weight)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	N/A	N/A	Not classified
Triethylene glycol	(CAS No) 112-27-6	203-953-2	<40	Not classified
Propylene glycol	(CAS No) 57-55-6	200-338-0	<40	Not classified

The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret. Full text of H-phrases: see section 16

**SECTION 4: FIRST AID MEASURES****4.1. Description of First Aid Measures**

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Low degree of toxicity. Treat symptomatically.

**First-aid Measures After Inhalation:** Inhalation problems are not anticipated in light smoke conditions for those without respiratory conditions. Remove exposed person to fresh air if adverse effects, such as breathing difficulty, arise. If irritation persists, seek prompt medical attention. Use respiratory protection for prolonged or dense smoke conditions.

**First-aid Measures After Skin Contact:** Flush skin with large amounts of water. Wash affected areas with soap and water. Remove and wash contaminated clothing before re-use. Obtain medical attention if symptoms develop and persist.

**First-aid Measures After Eye Contact:** If in eyes, rinse with water for 15 minutes. Lift upper and lower lids during flushing to ensure complete removal of chemical. If irritation persists, seek prompt medical attention.

**First-aid Measures After Ingestion:** Ingestion of large amounts may be harmful. Keep at rest. Seek immediate medical attention/advice.

**4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms/Injuries:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Symptoms/Injuries After Inhalation:** None expected under normal conditions of use.

**Symptoms/Injuries After Skin Contact:** None expected under normal conditions of use.

**Symptoms/Injuries After Eye Contact:** None expected under normal conditions of use.

**Symptoms/Injuries After Ingestion:** None expected under normal conditions of use.

**4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed**

If you feel unwell, seek medical advice (show the label where possible).

**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing Media**

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**5.2. Special Hazards Arising From the Substance or Mixture**

**Fire Hazard:** Not flammable under normal conditions of handling.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**5.3. Advice for Firefighters**

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other information:** Do not allow run-off from fire fighting to enter drains or water courses.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapors, mist, spray).

**6.1.1. For Non-emergency Personnel**

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

**6.1.2. For Emergency Responders**

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

**6.2. Environmental Precautions**

Prevent entry to sewers and public waters.

**6.3. Methods and Material for Containment and Cleaning Up**

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** 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.

#### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

### SECTION 7: HANDLING AND STORAGE

#### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. 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.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** 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.

**Incompatible Products:** Strong oxidizing agents and acids.

Special packaging materials: Liquid-proof glass, plastic or non-corrodible metal containers are recommended.

#### 7.3. Specific End Use(s)

Smoke liquid.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

#### 8.2. Exposure Controls

**Appropriate Engineering Controls** : Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment** : Not generally required. The use of personal protective equipment may be necessary as conditions warrant.

**Materials for Protective Clothing** : Chemically resistant materials and fabrics.

**Hand Protection** : Wear chemically resistant protective gloves.

**Eye Protection** : Chemical goggles or safety glasses.

**Respiratory Protection** : Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

**Other Information** : When using, do not eat, drink or smoke.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on Basic Physical and Chemical Properties

**Physical State** : Liquid

**Appearance** : Clear.

**Odor** : Faint Odor.

**Odor Threshold** : No data available

**pH** : 7.0 (approximately)

**Relative Evaporation Rate (butylacetate=1)** : 0.01

**Melting Point** : No data available

**Freezing Point** : Not available

**Boiling Point** : >100 °C

**Flash Point** : Does not flash

**Auto-ignition Temperature** : No data available

**Decomposition Temperature** : No data available

**Flammability (solid, gas)** : Not flammable under normal conditions of use

**Vapor Pressure** : 8.4 (approximately)



- Relative Vapor Density at 20 °C : 2.9
  - Relative Density : No data available
  - Specific Gravity : 1.05 (approximately)
  - Solubility : Soluble in water.
  - Log Pow : No data available
  - Log Kow : No data available
  - Viscosity, Kinematic : No data available
  - Viscosity, Dynamic : No data available
  - Explosive Properties : No data available
  - Oxidizing Properties : No data available
  - Explosive Limits : Not applicable
- 9.2. Other Information No additional information available

**SECTION 10: STABILITY AND REACTIVITY**

- 10.1 **Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2 **Chemical Stability:** Stable under normal conditions.
- 10.3 **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4 **Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Incompatible materials.
- 10.5 **Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6 **Hazardous Decomposition Products:** None

**SECTION 11: TOXICOLOGICAL INFORMATION**

11.1. Information On Toxicological Effects

Acute Toxicity : Not classified

<b>Water (7732-18-5)</b>	
LC50 Inhalation Rat (ppm)	100000 ppm
<b>Propylene glycol (57-55-6)</b>	
LD50 Oral Rat	20000 mg/kg
LD50 Dermal Rabbit	20800 mg/kg
<b>Triethylene glycol (112-27-6)</b>	
LD50 Oral Rat	15000 mg/kg
LD50 Dermal Rabbit	> 20 ml/kg

**Skin Corrosion/Irritation:** May cause Irritation.

**pH:** 7.0 (approximately)

**Serious Eye Damage/Irritation:** Direct contact may cause mild eye irritation

**pH:** 7.0 (approximately)

**Respiratory or Skin Sensitization:** Possible inhalation irritant. Irritating to skin

**Germ Cell Mutagenicity:** Not expected to be mutagenic in humans.

**Carcinogenicity:** No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Reproductive Toxicity:** Not expected to have other reproductive effects.

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Possible inhalation irritant.

**Symptoms/Injuries After Inhalation:** Can cause irritation of the respiratory tract. Persons suffering from asthma or reactive airway disorders may experience asthma-like effects from exposure to this material

**Symptoms/Injuries After Skin Contact:** May cause irritation.

**Symptoms/Injuries After Eye Contact:** May cause mild transient irritation.

**Symptoms/Injuries After 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.

**SECTION 12: ECOLOGICAL INFORMATION**
**12.1. Toxicity**

<b>Propylene glycol (57-55-6)</b>	
<b>LC50 Fish 1</b>	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
<b>EC50 Daphnia 1</b>	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
<b>EC50 Other Aquatic Organisms 1</b>	19000 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
<b>LC 50 Fish 2</b>	41 (41 - 47) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
<b>EC50 Daphnia 2</b>	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
<b>Triethylene glycol (112-27-6)</b>	
<b>LC50 Fish 1</b>	56200 - 63700 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
<b>EC50 Daphnia 1</b>	42426 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>LC 50 Fish 2</b>	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

**12.2. Persistence and Degradability**

<b>BULLEX SMOKE LIQUID &amp; BULLEX SMOKE SIMULATION FLUID</b>	
<b>Persistence and Degradability</b>	Entirely soluble in water. However, it is recommended not to allow the material to enter the environment

**12.3. Bioaccumulative Potential**

<b>BULLEX SMOKE LIQUID &amp; BULLEX SMOKE SIMULATION FLUID</b>	
<b>Bioaccumulative Potential</b>	Gives almost no bioaccumulation. However, it is recommended not to allow the material to enter the environment
<b>Propylene glycol (57-55-6)</b>	
<b>BCF fish 1</b>	< 1
<b>Triethylene glycol (112-27-6)</b>	
<b>Log Pow</b>	-1.98 (at 25 °C)

**12.4. Mobility in Soil** No additional information available

**12.5. Other Adverse Effects**

**Other Information** : Avoid release to the environment.

**SECTION 13: DISPOSAL CONSIDERATIONS**
**13.1. Waste treatment methods**

**Waste Disposal Recommendations:** 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. See Section 7 (Handling and Storage) section for further details.

**SECTION 14: TRANSPORT INFORMATION**

In Accordance With ICAO/IATA/IMDG/DOT

**14.1. UN Number** Not regulated for transport

**14.2. UN Proper Shipping Name** Not regulated for transport

**14.3. Additional Information**

**Other information** : No supplementary information available.

**Transport by Sea** Not regulated for transport

**Air Transport** Not regulated for transport



**SECTION 15: REGULATORY INFORMATION**

**15.1 US Federal Regulations**

<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Propylene glycol (57-55-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory. This material is not subject to SARA Section 313 notification requirements, since it does not contain any Toxic Chemical Constituents above de minimus concentrations	
<b>EPA TSCA Regulatory Flag</b>	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
<b>Triethylene glycol (112-27-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory. This material is not subject to SARA Section 313 notification requirements, since it does not contain any Toxic Chemical Constituents above de minimus concentrations	

**15.2 US State Regulations**

<b>Propylene glycol (57-55-6)</b>	
U.S. - Minnesota - Hazardous Substance List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term	
<b>Triethylene glycol (112-27-6)</b>	
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term	

**15.3 Canadian Regulations**

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

**Canadian WHMIS Classification:** Not regulated.

**SECTION 16: OTHER INFORMATION**

Revision date : 10/07/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**DISCLAIMER OF LIABILITY**

*Every effort has been made to ensure that the safety information on this sheet is accurate, but because BullEx, Inc. has no control over the conditions under which the product will be used, liability is limited exclusively to replacement or refund of the purchase price of this product. Except as stated herein, there are no express or implied warranties, including implied warranties of merchantability or fitness for a particular purpose. BullEx, Inc. assumes no liability for injury or incidental or consequential damages arising out of storage, handling or use of this product.*

SDS US (GHS HazCom) - US