Section 1: Identification

Product Identifier: Activated Chemiluminescent Device - All Colors Visible and Infrared

Synonyms: N/A

Chemical Abstracts Registry Number: N/A

REACH Registration Number: Pending

Identified uses: Chemical lighting

Supplier/Manufacturer: Cyalume Technologies, Inc.
96 Windsor St.
West Springfield, MA 01089
USA
1-888-858-7881

e-mail: info@cyalume.com

Emergency contact Chemtrec: 1-800-424-9300

Section 2: Hazards Identification

Classification of the substance or mixture
OSHA Haz Com: CFR 1910.1200: Flammable Liquids [Category 4],
Acute Toxicity Oral [Category 4], H302
Skin Corrosion/Irritation [Category 2], H315
Eye Irritation [Category 2A], H319
Respiratory Irritation [Category 3], H335

GHS Label elements, including precautionary statements

Signal Word: Warning!

Pictograms or Symbols:

Precautionary Statements:

[Prevention] P233-Keep container tightly closed.
P261-Avoid breathing dust/fume/gas/mist/vapors/spray.
P271-Use only outdoors or in a well-ventilated area.
P280-Wear protective gloves/eye protection/face protection.

[Response] P303+P361+P353-IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340-IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338-IF IN THE EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312-Call a Poison Center or doctor/physician if you feel unwell.
P313-If skin irritation occurs: Get medical attention/advice.
P337-If eye irritation persists: Get medical attention/advice.

[Storage] P403+P235-Store in a well-ventilated place. Keep cool.

[Disposal] P501-Dispose of contents/container through a waste management company authorized by the local government.

Hazards not otherwise classified (HNOC) or covered by GHS – none known

### Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene (case)</td>
<td></td>
<td>40-60</td>
</tr>
<tr>
<td>Glass</td>
<td></td>
<td>4-10</td>
</tr>
<tr>
<td>Butyl Benzoate</td>
<td>136-60-7</td>
<td>0-20</td>
</tr>
<tr>
<td>Glycerol Tribenzoate</td>
<td>614-33-5</td>
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</tr>
<tr>
<td>Propylene glycol dibenzoate</td>
<td>19224-26-1</td>
<td>0-20</td>
</tr>
<tr>
<td>Pentyl 2,3,5-trichloro-6-hydroxybenzoate</td>
<td>30431-53-9</td>
<td>0.6-8</td>
</tr>
<tr>
<td>One or more dyes</td>
<td></td>
<td>0-0.2</td>
</tr>
<tr>
<td>Triethyl citrate</td>
<td>77-93-0</td>
<td>7-12</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>0.5-1.4</td>
</tr>
<tr>
<td>Sodium salicylate</td>
<td>54-21-7</td>
<td>0.002-1.3</td>
</tr>
</tbody>
</table>

### Section 4: First-Aid Measures

**Eye:** In case of eye contact, immediately irrigate with plenty of water for 15 minutes.

**Skin:** In case of skin contact wash affected areas of skin with soap and water.

**Inhalation:** If inhaled, move person to fresh air.

**Ingestion:** Rinse mouth with water.

**Immediate medical attention:**

**Warning:** It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. If breathing has stopped, perform artificial respiration. Use first
aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Section 5: Firefighting Measures

**Suitable Extinguishing Media:** Use water spray, carbon dioxide or dry chemical to extinguish fires.

**Fire Fighting Procedures:** Use water to keep containers cool. Wear self-contained, positive pressure breathing apparatus.

**Unusual Fire and Explosion Hazards:** N/A

**Combustion Products:** Materials which on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material.

Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

**Methods and materials for containment and cleaning up:** Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, sawdust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Section 7: Handling and Storage

**Handling:** Do not get in eyes, on skin or on clothing. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.

**Storage:** Store in tightly closed containers in cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles. Keep containers tightly closed and upright when not in use. Protect against physical damage.

Section 8: Exposure Controls/Personal Protection

**Exposure Limits:** Contains no substances with occupational exposure limit values.

**Engineering Controls:** Engineering controls are not usually necessary if good hygiene practices are followed. Before eating, drinking, or smoking, wash face and hands thoroughly.

**Personal Protective Equipment:**

- **Respiratory protection:** Work outdoors or in a well-ventilated area. If in a confined area, use a MSHA/NIOSH approved respirator or equivalent.
- **Hand Protection:** Wear protective gloves.
- **Eye Protection:** Wear safety glasses.
- **Skin and Body Protection:** Wear a lab coat.
Section 9: Physical and Chemical Properties

Odor/Appearance: Article consisting of plastic tube or shape containing broken glass and liquid.

Melting/freezing point: 248°F (120°C) (polyethylene casing)
Boiling point: not available
Vapor pressure: not available
Flashpoint: >200°F (>93°C) Closed cup
Autoignition temperature: >400°F (>204°C) at 760 mm Hg

Vapor Density(Air=1): Not Available
% Solubility in Water: Insoluble

Pour Point: Not Available

Lower Flammability Limit: Not Available
Upper Flammability Limit: Not Available
Specific Gravity: Not Available
% Volatile: Negligible
Evaporation Rate (Water=1): 5(Butyl Acetate =1)
Viscosity: Not available
pH: N/A

Molecular Formula: Mixture
Molecular Weight: Mixture

Section 10: Stability and Reactivity


Hazardous Reactions/Decomposition Products: Thermal decomposition products may include oxides of carbon and nitrogen.

Section 11: Toxicological Information

Signs and Symptoms of Overexposure: Irritation.
Acute Effects: Irritation.
Eye Contact: May cause irritation.
Skin Contact: May cause irritation.
Inhalation: May cause respiratory tract irritation.
Ingestion: May cause irritation of the digestive tract.
Target Organ Effects: None known.
Chronic Effects: Chronic exposure may cause blood effects. Exposure to high concentrations may cause central nervous system depression. Medical Conditions Aggravated by Exposure: None known.

Acute Toxicity Values
Oral LD50 (Rat) = Not Available
Dermal LD50 (Rabbit) = Not Available
Inhalation LC50 (Rat) = Not available
Section 12: Ecological Information

Not available
Bioaccumulation is not expected to be significant.

Section 13: Disposal Considerations

Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14: Transport Information

U.S. Department of Transportation (DOT)
Proper Shipping Name: Not Regulated
Hazard Class: Not Regulated
UN/NA Number: N/A
Packing Group: N/A
Labels Required: N/A

International Maritime Organization (IMDG)
Proper Shipping Name: Not Regulated
Hazard Class: Not Regulated
UN/NA Number: N/A
Packing Group: N/A
Labels Required: N/A

IATA
Proper Shipping Name: Not Regulated
Hazard Class: Not Regulated
UN/NA Number: N/A
Packing Group: N/A
Labels Required: N/A

Section 15: Regulatory Information

U.S. Federal Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): N/A
Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Clean Water Act (CWA): Consult Federal, State and local regulations for specific requirements.

Clean Air Act (CAA): Consult Federal, State and local regulations for specific requirements.
Superfund Amendments and Reauthorization Act (SARA) Title III Information:

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
No SARA Hazards

**Massachusetts Right To Know Components**
No Components Listed

**Pennsylvania Right To Know Components**
- Polyethylene (case)
- Glass
  - Butyl Benzoate: 136-60-7
  - Pentyl 2,3,5-trichloro-6-hydroxybenzoate: 30431-53-9
  - Triethyl citrate: 77-93-0
  - Water: 7732-18-5
  - Sodium salicylate: 54-21-7

**New Jersey Right To Know Components**
- Polyethylene (case)
- Glass
  - Butyl Benzoate: 136-60-7
  - Pentyl 2,3,5-trichloro-6-hydroxybenzoate: 30431-53-9
  - Triethyl citrate: 77-93-0
  - Water: 7732-18-5
  - Sodium salicylate: 54-21-7

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### Section 16: Other Information

**National Fire Protection Association (NFPA) Ratings:** This information is intended solely for the use of individuals trained in the NFPA system.

- **Health:** 2
- **Flammability:** 1
- **Reactivity:** 0

**Revision Indicator:** Convert to SDS format.
Disclaimer: The information contained herein is accurate to the best of our knowledge. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.
Section 1: Identification

Product Identifier: Chemiluminescent Device - All Colors Visible and Infrared

Synonyms: N/A

Chemical Abstracts Registry Number: N/A

REACH Registration Number: Pending

Identified uses: Chemical lighting

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Pictograms or Symbols:

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[Response] P302+P361+P353-IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340-IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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P312-Call a Poison Center or doctor/physician if you feel unwell.
P313-If skin irritation occurs: Get medical attention/advice.
P337-If eye irritation persists: Get medical attention/advice.

[Storage] P403+P235-Store in a well-ventilated place. Keep cool.

[Disposal] P501-Dispose of contents/container through a waste management company authorized by the local government.

Hazards not otherwise classified (HNOC) or covered by GHS – none known

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<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>0.5-1.0</td>
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### Section 4: First-Aid Measures

**Eye:** In case of eye contact, immediately irrigate with plenty of water for 15 minutes.

**Skin:** In case of skin contact wash affected areas of skin with soap and water.

**Inhalation:** If inhaled, move person to fresh air.

**Ingestion:** Rinse mouth with water.

**Immediate medical attention:**

**Warning:** It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. If breathing has stopped, perform artificial respiration. Use first
Section 5: Firefighting Measures

Suitable Extinguishing Media: Use water spray, carbon dioxide or dry chemical to extinguish fires.

Fire Fighting Procedures: Use water to keep containers cool. Wear self-contained, positive pressure breathing apparatus.

Unusual Fire and Explosion Hazards: N/A

Combustion Products: Materials which on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

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Handling: Do not get in eyes, on skin or on clothing. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.

Storage: Store in tightly closed containers in cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles. Keep containers tightly closed and upright when not in use. Protect against physical damage.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: Contains no substances with occupational exposure limit values.

Engineering Controls: Engineering controls are not usually necessary if good hygiene practices are followed. Before eating, drinking, or smoking, wash face and hands thoroughly.

Personal Protective Equipment:

   Respiratory protection: Work outdoors or in a well-ventilated area. If in a confined area, use a MSHA/NIOSH approved respirator or equivalent.

   Hand Protection: Wear protective gloves.

   Eye Protection: Wear safety glasses.

   Skin and Body Protection: Wear a lab coat.
Section 9: Physical and Chemical Properties

**Odor/Appearance:** Article consisting of plastic tube or shape containing glass and liquids

**Melting/freezing point:** 248°F (120°C) (polyethylene casing)
**Boiling point:** not available
**Vapor pressure:** not available
**Flashpoint:** >200°F (93°C) Closed cup
**Autoignition temperature:** >400°F (204°C) at 760 mm Hg

**Vapor Density (Air=1):** Not Available
**% Solubility in Water:** Insoluble

**Pour Point:** Not Available

**Lower Flammability Limit:** Not Available
**Upper Flammability Limit:** Not Available
**Specific Gravity:** Not Available
**% Volatile:** Negligible
**Evaporation Rate (Water=1):** 5 (Butyl Acetate =1)
**Viscosity:** Not available
**pH:** N/A

**Molecular Formula:** Mixture
**Molecular Weight:** Mixture

Section 10: Stability and Reactivity

**Stability/Incompatibility:** Stable. Avoid strong oxidizers.

**Hazardous Reactions/Decomposition Products:** Thermal decomposition products may include oxides of carbon and nitrogen.

Section 11: Toxicological Information

**Signs and Symptoms of Overexposure:** Irritation.
**Acute Effects:** Irritation.
**Eye Contact:** May cause irritation.
**Skin Contact:** May cause irritation.
**Inhalation:** May cause respiratory tract irritation.
**Ingestion:** May cause irritation of the digestive tract.
**Target Organ Effects:** None known.
**Chronic Effects:** Chronic exposure may cause blood effects. Exposure to high concentrations may cause central nervous system depression. Medical Conditions Aggravated by Exposure: None known.

**Acute Toxicity Values**
- Oral LD50 (Rat) = Not Available
- Dermal LD50 (Rabbit) = Not Available
- Inhalation LC50 (Rat) = Not available
Section 12: Ecological Information

Not available
Bioaccumulation is not expected to be significant.

Section 13: Disposal Considerations

Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14: Transport Information

U.S. Department of Transportation (DOT)
**Proper Shipping Name:** Not Regulated
**Hazard Class:** Not Regulated
**UN/NA Number:** N/A
**Packing Group:** N/A
**Labels Required:** N/A

International Maritime Organization (IMDG)
**Proper Shipping Name:** Not Regulated
**Hazard Class:** Not Regulated
**UN/NA Number:** N/A
**Packing Group:** N/A
**Labels Required:** N/A

IATA
**Proper Shipping Name:** Not Regulated
**Hazard Class:** Not Regulated
**UN/NA Number:** N/A
**Packing Group:** N/A
**Labels Required:** N/A

Section 15: Regulatory Information

U.S. Federal Regulations
Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): N/A
Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Clean Water Act (CWA): Consult Federal, State and local regulations for specific requirements.

Clean Air Act (CAA): Consult Federal, State and local regulations for specific requirements.

Superfund Amendments and Reauthorization Act (SARA) Title III Information:
**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
No SARA Hazards

**Massachusetts Right To Know Components**
No Components Listed

**Pennsylvania Right To Know Components**
- Polyethylene (case)
- Glass
- Butyl Benzoate: 136-60-7
- Glycerol Tribenzoate: 614-33-5
- Propylene glycol dibenzoate: 19224-26-1
- Bis(2,4,5-trichloro-6-carbopentoxyphenyl)oxalate: 75203-51-9
- Triethyl citrate: 77-93-0
- Hydrogen peroxide: 7722-84-1
- Water: 7732-18-5
- Sodium salicylate: 54-21-7

**New Jersey Right To Know Components**
- Polyethylene (case)
- Glass
- Butyl Benzoate: 136-60-7
- Glycerol Tribenzoate: 614-33-5
- Propylene glycol dibenzoate: 19224-26-1
- Bis(2,4,5-trichloro-6-carbopentoxyphenyl)oxalate: 75203-51-9
- Triethyl citrate: 77-93-0
- Hydrogen peroxide: 7722-84-1
- Water: 7732-18-5
- Sodium salicylate: 54-21-7

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**Section 16: Other Information**

**National Fire Protection Association (NFPA) Ratings:** This information is intended solely for the use of individuals trained in the NFPA system.

**Health:** 2  
**Flammability:** 1  
**Reactivity:** 0
Revision Indicator: Convert to SDS format.

Disclaimer: The information contained herein is accurate to the best of our knowledge. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.