

**Section 1: Identification****1.1 Product Identifier:** Activated Chemiluminescent Device - All Colors Visible and Infrared

Synonyms: N/A

Chemical Abstracts Registry Number: N/A

REACH Registration Number: N/A

**1.2 Identified uses:**

Identified uses: Chemical light

**1.3 Supplier/Manufacturer:**

Cyalume Technologies, Inc.

96 Windsor St.

West Springfield, MA 01089

USA

1-888-858-7881

e-mail: [info@cyalume.com](mailto:info@cyalume.com)**1.4 Emergency contact**

Chemtrec: 1-800-424-9300

In France: ORFILA: numéro ORFILA (INRS): + 33 (0)1 45 42 59 59

**Section 2: Hazards Identification****2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP) and OSHA Haz Com: CFR 1910.1200:****Hazard Statements:**

H302 Harmful if swallowed (Category 4)

H315 Causes skin irritation (Category 2)

H319 Causes serious eye irritation (Category 2A)

H332 Harmful if inhaled (Category 4)

**2.1.2 Additional information:**

For full text of Hazard- and EU Hazard- statements see Section 16.

**2.2 GHS Label elements, including precautionary statements****Pictograms:****Signal Word: Warning**

**Hazard Statements:**

- H302 Harmful if swallowed (Category 4)  
 H315 Causes skin irritation (Category 2)  
 H319 Causes serious eye irritation (Category 2A)  
 H332 Harmful if inhaled (Category 4)

**Precautionary Statements:**

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only in well ventilated area.  
 P280 Wear protective gloves/ eye protection/ face protection.  
 P301+P330+P312 IF SWALLOWED: Rinse mouth with water. Call a POISON CENTER or doctor/physician if you feel unwell.  
 P302+ P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304+ P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
 P305+ P351+P388 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
 P332+P313 If skin irritation occurs: Get medical advice/ attention.  
 P337+P313 If eye irritation persists: Get medical advice/ attention.  
 P362+P364 Take off contaminated clothing and wash before use.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P501 Dispose of contents/container to comply with local, state, and federal regulations.

**2.3 Other Hazards**

None known.

**Section 3: Composition/Information on Ingredients****3.1 Substances**

<u>Name</u>	<u>Product Identifier</u>	<u>Weight %</u>
N/A		

**3.2 Mixtures****Hazardous components**

<u>Component</u>	<u>Product Identifier</u>	<u>Weight %</u>	<u>GHS Classification</u>
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<u>Component</u>	<u>Product Identifier</u>	<u>Weight %</u>	<u>GHS Classification</u>
Polyethylene (case)		40-60%	No hazards according to OSHA and ECHA
Glass (ampoule)		0-10%	No hazards according to OSHA and ECHA
Butyl benzoate	CAS No. 136-60-7 EC No. 205-252-7	0-20%	Skin Irritation (Category 2) Eye Irritation (Category 2) Respiratory Tract (Category 4) Acute Toxin (Category 4)
Glycerol tribenzoate	CAS No. 614-33-5 EC No. 210-379-6	0-5%	No hazards according to OSHA and ECHA
Propylene glycol dibenzoate	CAS No. 19224-26-1 EC No. 242-894-7	0-20%	No hazards according to OSHA and ECHA
Benzoic acid; 2,3,5-trichloro-6-hydroxy-, pentyl ester	CAS No. 30431-53-9 EC No. 250-194-8	0.6-8%	Skin Irritation (Category 4) Eye Irritation (Category 4) Respiratory Tract (Category 4)
One or more dyes	CAS No. multiple EC No. multiple	0-0.2	No hazards according to OSHA and ECHA
Triethyl citrate	CAS No. 77-93-0	7-12%	No hazards according to OSHA

	EC No. 201-070-7		and ECHA
Water	CAS No. 7732-18-5 EC No. 231-791-2	0.7-1.4%	No hazards according to OSHA and ECHA
Sodium salicylate	CAS No. 54-21-7 EC No. 200-198-0	0.002-1.3%	Eye Irritation (Category 2A) Acute Toxin (Category 4)

## Section 4: First-Aid Measures

### 4.1 Description of first aid measures

**General:**

**Inhalation:** Move victim to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth to mouth resuscitation.

**Skin:** Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs, get medical advice/attention.

**Eye:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue to wash with water for several minutes. If eye irritation occurs, get medical advice/attention.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Never give anything by mouth to an unconscious person.

### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms/injuries after skin contact:** Causes skin irritation.

**Symptoms/injuries after eye contact:** Causes serious eye irritation.

**Symptoms/injuries after mist/vapor inhalation:** May cause respiratory tract irritation.

### 4.3 Indication of any immediate medical attention and special treatment needed

No additional information available.

## Section 5: Firefighting Measures

### 5.1 Extinguishing media

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special Hazards arising from the substance or mixture

**Fire hazard:** If this material is involved in a fire, the following can be released: Carbon monoxide, Carbon dioxide, Hydrogen chloride

**Explosion hazard:** No data available.

**Reactivity:** No data available.

### 5.3 Advice for firefighters

**Fire Fighting Procedures:** Use water spray or fog to cool exposed containers. Wear self-contained breathing apparatus.

**Combustion Products:** Carbon monoxide, Carbon dioxide, Hydrogen chloride

## Section 6: Accidental Release Measures

### 6.1 Personal precautions, protective equipment, and emergency procedures

**6.1.1. For non-emergency personnel:** Remove non-emergency personnel from the area of the spill.

**6.1.2. For emergency responders:** Wear respirator protection. Avoid breathing vapors, mist, or gas. For personal protection equipment, see Section 8.

## 6.2 Environmental precautions

Do not allow to enter drains or waterways. Notify the appropriate authorities if liquid enters sewers or public waters.

## 6.3 Methods and materials for containment and cleaning up:

**6.3.1. Appropriate advice for containing a spill:** Soak up with inert absorbent material in loose form or surround and soak up with appropriate boom. Cover drains.

**6.3.2. Appropriate advice for clean-up of a spill:** Neutralize spill and absorb with noncombustible absorbent material. Shovel material or place contaminated material into suitable container with cover. Dispose of as hazardous waste.

**6.3.3. Other information relating to spills and releases, including inappropriate containment or clean-up techniques:** For disposal see section 13.

## 6.4 Reference to other sections

See Section 8 for personal protection equipment. See section 13 for proper disposal.

# Section 7: Handling and Storage

## 7.1 Precautions for safe handling

Protective measures: Keep material away from strong oxidizing agents.

Measures to prevent fire: N/A

Measures to prevent aerosol and dust generation: Provide good ventilation in work area.

Measures to protect environment: Keep material away from drains and ground water.

General occupational hygiene: Follow good hygiene practices. Do not eat, drink, or smoke around the material.

Wash hands after handling the material. Immediately remove contaminated clothing. Wash contaminated clothing before reuse. Use appropriate personal protection equipment. (See Section 8)

## 7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Keep material away from excessive heat or cold. Store in a well-ventilated area. Keep container closed when not in use. Avoid the formation of aerosols.

Packaging materials: Store in polyethylene or polypropylene containers. Do not store in metal containers.

Requirements for storage rooms and vessels: Make sure that stored material cannot enter drains or surface water.

Storage class:

Further information on storage conditions: Keep away from direct sunlight.

## 7.3 Specific end uses(s)

Recommendations: See Section 1.2.

Industrial sector specific: N/A

# Section 8: Exposure Controls/Personal Protection

## 8.1 Control parameters

### Components with workplace control parameters

Component	CAS No.	Value	Control parameters	Basis
Butyl Benzoate	136-60-7			Substance has no occupational exposure limits.

### Components with workplace control parameters

Component	CAS No.	Value	Control parameters	Basis
Benzoic acid; 2,3,5-trichloro-6-hydroxy-, pentyl ester	30431-53-9			Substance has no occupational exposure limits.

### Components with workplace control parameters

Component	CAS No.	Value	Control parameters	Basis
Sodium salicylate	54-21-7			Substance has no occupational exposure limits.

## 8.2 Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

### Personal protective equipment

**Eye/face protection:** Use equipment for eye protection tested and approved under the appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove technique to avoid skin contact. Dispose of gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body protection:** The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a back-up to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or ECN (EU).

**Control of environmental exposure:** Do not let product enter drains.

## Section 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

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

**Odor:** No data available

**Odor threshold:** No data available

**pH:** No data available

**Melting/freezing point:** No data available

**Initial boiling point and boiling range:** No data available

**Flashpoint:** >200°F (93°C) Closed Cup

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limit:** No data available

**Vapor pressure:** No data available

**Vapor density (Air = 1):** No data available

**Relative density:** No data available

**Solubility(ies):** Water: Solubility in water of component(s) of the mixture :

• Sodium salicylate: 124.6 g/100 mL (25°C) • Butyl benzoate: 120 g/l (at 25°C) • Triethyl citrate: 65 g/l • Glycerol tribenzoate: 0.002 g/l • Propylene glycol dibenzoate: insoluble.

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** >400°F (204°C) at 760mm Hg

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing properties:** No data available

### 9.2 Other information

No additional information.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

Avoid contact with strong oxidizing materials.

### 10.2 Chemical Stability

Stable under recommended storage and handling conditions.

### 10.3 Possibility of hazardous reactions

Avoid contact with strong oxidizing materials.

### 10.4 Conditions to avoid

Avoid contact with strong oxidizing materials.

### 10.5 Incompatible materials

Strong oxidizing materials.

### 10.6 Hazardous decomposition products

Thermal decomposition or combustion products may include oxides of carbon and hydrogen chloride gas.

## Section 11: Toxicological Information

### 11.1 Information on toxicological effects

**Acute Toxicity:** Sodium Salicylate:

orl-rat LD50: 930 mg/kg

Intraperitoneal-rat LD50: 542 mg/kg

**Eye Contact:** Causes eye irritation.

**Skin Contact:** Causes skin irritation.

**Inhalation:** Respiratory tract irritation

**Ingestion:** no data available

**Target Organ Effects:** no data available

**Chronic Effects:** no data available

**Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Specific target organ toxicity - single exposure:** no data available

**Specific target organ toxicity - repeated exposure:** no data available

**Aspiration hazard:** no data available

**Additional Information:**

RTECS: not available

## Section 12: Ecological Information

### 12.1 Toxicity

No additional information available.

### 12.2 Persistence and degradability

**Abiotic degradation:** Not available

**Physical-and photochemical elimination:** Not available

**Biodegradation:** Not available

### 12.3 Bioaccumulative potential

**Partition coefficient n-octanol/water (log KOW):** Not available

**Bioconcentration factor (BCF):** Not available

#### 12.4 Mobility in soil

Not available

#### 12.5 Results of PBT and vPvB assessment

Not applicable

#### 12.6 Other adverse effects

Not available

### Section 13: Disposal Considerations

#### 13.1 Waste disposal methods

**13.1.1. Product/Packaging disposal:** Dispose of unused material and containers in accordance with local/national regulations.

**Waste codes/waste designations according to LoW:** The valid EWC waste code numbers are source related. The manufacturer is therefore unable to specify EWC waste codes for articles or products used in various sectors.

**13.1.2. Waste treatment-relevant information:** Not available

**13.1.3. Sewage disposal-relevant information:** Do not allow product to enter drains or water supplies.

**13.1.4. Other disposal recommendations:** Consult local/national regulations for safe disposal.

### 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

#### 15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture

##### EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EU) 453/2010.

#### **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**

Benzoic acid; 2,3,5-trichloro-6-hydroxy-, pentyl ester CAS No. 30431-53-9

##### **Pennsylvania Right To Know Components**

Benzoic acid; 2,3,5-trichloro-6-hydroxy-, pentyl ester CAS No. 30431-53-9

##### **New Jersey Right To Know Components**

Benzoic acid; 2,3,5-trichloro-6-hydroxy-, pentyl ester CAS No. 30431-53-9

##### **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**

#### **Hazard Statements:**

- H302 Harmful if swallowed (Category 4)
- H315 Causes skin irritation (Category 2)
- H319 Causes serious eye irritation (Category 2A)
- H332 Harmful if inhaled (Category 4)

#### **Precautionary Statements:**

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only in well ventilated area.
- P280 Wear protective gloves/ eye protection/ face protection.
- P301+P330+P312 IF SWALLOWED: Rinse mouth with water. Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+ P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+ P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305+ P351+P388	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/ attention.
P337+P313	If eye irritation persists: Get medical advice/ attention.
P362+P364	Take off contaminated clothing and wash before use.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to comply with local, state, and federal regulations.

### **HMIS Rating**

Health hazard: Not available  
Chronic Health Hazard: Not available  
Flammability: Not available  
Physical Hazard: Not available

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

**Health:** Not available  
**Flammability:** Not available  
**Reactivity:** Not available

### **Other regulations, limitations and prohibitive regulations:**

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorization for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

**Revision Indicator:** Convert to SDS format.

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