



**Cyalume Technologies, Inc.**  
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**MATERIAL SAFETY DATA    MSDS No. 6010**

**Date: 8/30/08  
Supercedes: N/A**

**PRODUCT IDENTIFICATION**

PRODUCT NAME: "ACTIVATED" Chemiluminescent Product  
*(TEC Component)* All Colors

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SYNONYMS: All products

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CHEMICAL FAMILY: Plastic article containing chemiluminescer and activator components.

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MOLECULAR FORMULA: Mixture

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MOLECULAR WEIGHT.: Mixture

**COMPOSITION**

| <u>Component</u> | <u>C.A.S. #</u> | <u>Weight %</u> |
|------------------|-----------------|-----------------|
| Polyethylene     | 9002-88-4       | 35-56%          |
| Foil             | -----           | 12-13%          |
| Chemiluminescer  | -----           | 24-30%          |
| TEC Activator    | -----           | 19-24%          |

**OSHA REGULATED COMPONENTS**

| <u>COMPONENT</u>  | <u>C.A.S. #</u> | <u>Weight%</u> | <u>TWA/CEILING</u>    | <u>REFERENCE</u> |
|-------------------|-----------------|----------------|-----------------------|------------------|
| Hydrogen peroxide | 7722-84-1       | 0.5-0.7%       | 1.4 mg/m <sup>3</sup> | OSHA/ACGIH       |

**NFPA HAZARD RATING**

1 FIRE: Material that must be preheated before ignition can occur.

0 HEALTH: Materials that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material.

0 REACTIVITY: Materials that in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.

**HEALTH HAZARD INFORMATION**

EFFECTS OF OVEREXPOSURE: Overexposure to chemical ingredients is not likely to cause significant acute toxic effects. The acute oral (rat) and acute dermal (rabbit) LD50 values are greater than 5 g/kg for the luminescer, activator, fresh mixture, and spent mixture. Upon accidental eye exposure, material should be immediately rinsed from the eyes. No significant skin irritation was observed during animal testing.

**FIRST AID**

In case of eye contact, immediately irrigate with plenty of water for 15 minutes. Obtain medical attention if irritation persists.

## EXPOSURE CONTROL METHODS

Engineering controls are not usually necessary if good hygiene practices are followed. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. Avoid unnecessary skin contact. Impervious gloves are recommended to prevent prolonged skin contact. For operations where eye or face contact can occur, eye protection is recommended. Where exposures are below the Permissible Exposure Limit (PEL), no respiratory protection is required. Where exposures exceed the PEL, use respirator approved by NIOSH for the material and level of exposure. See "GUIDE TO INDUSTRIAL RESPIRATORY PROTECTION" (NIOSH).

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## FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT: >200°F (93.3°C)  
METHOD: Closed Cup

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FIRE FIGHTING: Use water spray, carbon dioxide or dry chemical to extinguish fires. Use water to keep containers cool. Wear self-contained positive pressure breathing apparatus.

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## REACTIVITY DATA

STABILITY: Stable  
CONDITIONS TO AVOID: None known

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POLYMERIZATION:  
CONDITION TO AVOID: Will Not Occur  
None known

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INCOMPATIBLE  
MATERIALS: None known

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HAZARDOUS  
DECOMPOSITION  
PRODUCTS: Thermal decomposition or combustion may produce carbon monoxide and/or carbon dioxide

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## PHYSICAL PROPERTIES

APPEARANCE: Article consisting of plastic tube or shape containing broken glass ampoule after activation with oxalate component.

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BOILING POINT: N.A.

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MELTING POINT: 260 °C

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VAPOR PRESSURE : N.A.

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SPECIFIC GRAVITY: < Water

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VAPOR DENSITY: N.A.

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% VOLATILE (BY VOL.): N.A.

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pH: N.A.

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SATURATION IN AIR  
(BY VOL.) N.A.

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EVAPORATION RATE: N.A.

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SOLUBILITY IN WATER: Negligible

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| <b>SPILL OR LEAK PROCEDURES</b> | STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: | Cover spills with inert absorbent material; sweep up and place in waste disposal container. |
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| <b>WASTE DISPOSAL</b> | Disposal must be made in accordance with applicable governmental regulations. |  |
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| <b>SPECIAL PRECAUTIONS</b> | HANDLING AND STORAGE/OTHER: | NONE |
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| <b>D.O.T. SHIPPING INFORMATION</b> | PROPER SHIPPING NAME: | NOT APPLICABLE |
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| HAZARD CLASS: | NOT APPLICABLE |
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| UN/NA: | NOT APPLICABLE |
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| D.O.T. HAZARDOUS SUBSTANCES: | (Reportable quantity of product)<br>NOT APPLICABLE |
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| D.O.T. LABEL REQUIRED: | NOT APPLICABLE |
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| <b>TSCA INFORMATION</b> | This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. |  |
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| <b>ENVIRONMENTAL INFORMATION</b> | Wastes that are classified as hazardous waste are potentially subject to the RCRA Land Disposal Restrictions. The Land Disposal Restriction regulations are contained in 40 CFR 268. Only waste which meet the regulatory definition of a hazardous waste are subject to the land disposal restrictions. |  |
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Activated light sticks do not meet the definition of a Characteristic Hazardous Waste and therefore, under the regulations, can be disposed of as a solid waste in solid waste landfills and incinerators unless prohibited by site-specific solid waste facility restriction.

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