SAFETY DATA SHEET

EFFECTIVE DATE: 2/9/2016

ITEM: Fire Free Alert/Locate Kit

PART # 748

UPC 077403107483

CONTENTS:
Fluorescein Dye Marker
Green Light Stick

SHIPPING INFORMATION
not hazardous
# SAFETY DATA SHEET

## 1. Product and Company Identification

**Fluorescein Dye Marker**

**Identified Use:** Emergency distress signal

**Use Advised Against:** none

**Manufacturers Information**

Orion Safety Products  
3157 North 500 West  
Peru, IN 46970  
US 1-800-851-5260  
Intl (11) 1-765-472-4375

## 2. Hazards Identification

**GHS Classifications**

<table>
<thead>
<tr>
<th>Eye Damage / Iritation</th>
<th>Category 1</th>
<th>H318</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT - Single Exposure</td>
<td>Category 3</td>
<td>H335</td>
</tr>
</tbody>
</table>

**GHS Label Elements**

- **Pictograms**
  - [ ]
  - [ ]

- **Hazard Statements**
  - **H318** Causes serious eye damage
  - **H335** May cause respiratory irritation

- **Signal Word** Danger
- **Precautionary Statements**
  - P103 Keep out of reach of children
  - P370 In case of fire: use water deluge

- **Extinguishing Media**
  - Water deluge
  - Unsuitable Extinguishing Media
  - Foam and dry chemical extinguishers and suffocation are ineffective.

- **Protective Equipment and Precautions for Firefighters**
  - Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>EINCS #</th>
<th>%age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Fluorescein</td>
<td>518-47-8</td>
<td>208-253-0</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>144-55-6</td>
<td>206-633-8</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>Adipic Acid</td>
<td>124-04-9</td>
<td>204-673-3</td>
<td>&lt;20%</td>
</tr>
</tbody>
</table>

**Note:** Due to Confidential Business Information i.e. "Trade Secrets", the exact percentage of each ingredient has not been disclosed. CBI information will be shared with appropriate authorities if circumstances warrant.

## 4. First Aid Measures

**Description of first aid measures**

- **Inhalation**
  - If contents are inhaled, remove to fresh air. Watch for signs of allergic reaction. If other symptoms develop, get medical aid immediately.

- **Skin**
  - If contents are contacted, wash with soap and water for at least 15 minutes. Remove contaminated clothing and wash before reuse. Get medical aid if irritation occurs.

- **Eyes**
  - If contents get into eyes, flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses if easily possible. Get medical aid immediately.

- **Ingestion**
  - Get medical aid immediately.

**Most important symptoms and effects both acute and delayed**

See section 2 labeling and section 11

**Indication of any immediate medical attention and special treatment needed**

No data available

## 5. Firefighting Measures

- **Extinguishing Media** Water deluge
- **Protective Equipment and Precautions for Firefighters** Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**Specific Hazards Arising from the Chemical**

Avoid dust / air suspensions. As with any organic powder, the contents may be capable of a dust explosion fire.

**Further information**

No data available
6. Accidental Release Measures

**Personal Precautions / Protective Equipment / Emergency Procedures**

Do not breathe contents and avoid contact with skin and eyes. Dye will stain / color all exposed areas - wear Tyvek coveralls, goggles or face mask, dust mask / respirator and booties if available. If not, wear clothing with long sleeves, long pant legs, dust mask, rubber or nitrile gloves, safety goggles, and safety shoes when cleaning up contents.

**Environmental Precautions**

Contents are highly soluble in water and the dust has a great ability to migrate.

**Methods for Containment and Clean-up**

Place absorbent material onto floor before sweeping. Clean area in a manner so as to minimize dust. Wear gloves, safety goggles/goggles, and full-coverage clothing to minimize exposure and dye effects. For large spills, a dust mask is recommended. Pick up spill for recovery or disposal and place in lidded container. Wash area with soap and plenty of water. Material is completely gone when no additional green color is detected in wash water.

7. Handling and Storage

**Precautions for Safe Handling**

Contents will stain – handle with caution. Wear appropriate eye protection when using. Follow instructions on package. Avoid ingestion and inhalation of contents. Wash thoroughly after handling. Do not disassemble.

**Conditions for Safe Storage, Including Any Incompatibilities**

Store in a cool, dry place. Store away from food and beverages. Keep at temperature not exceeding: 60 °C (140 °F)

8. Exposure Controls / Personal Protection

**Control parameters**

<table>
<thead>
<tr>
<th>Exposure Limits</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Fluorescein</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Adipic Acid</td>
<td>Not Established</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

**Exposure controls**

**Engineering Controls / Personal Protective Equipment**

| Eye/Face Protection | When cleaning up contents, use local and/or general exhaust. |

| Skin Protection | No significant health effects but contents will stain all exposed areas. Wear Tyvek coveralls, rubber or nitrile gloves, and booties if available. If not, wear clothing with long sleeves, long pant legs, rubber or nitrile gloves, and safety shoes when cleaning up contents. Wash hands and face before eating, drinking or using tobacco products. |

| Respiratory Protection | None under normal conditions when using product. A particulate respirator (N95 or better filters) may be worn during the cleanup of spilled contents. |

| General Hygiene | Educate and train employees in the safe use and handling of hazardous materials. Maintain good housekeeping and safety practices. Do not let contents accumulate in storage or work areas. Clean spills up promptly. |

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Appearance (color, physical form, shape):</th>
<th>orange powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH:</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point / Range:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor:</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Partition Coefficient:</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto Ignition Temperature:</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability Limits:</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Chemical Stability</th>
<th>Stable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Incompatible Materials:</td>
<td>Oxidizing agents, acids</td>
</tr>
<tr>
<td>Possibility of Hazardous Reactions:</td>
<td>Hazardous polymerization will not occur</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td>Nitrogen oxides, carbon monoxide, carbon dioxide</td>
</tr>
</tbody>
</table>

11. Toxicology Information

**Ingredient acute toxicity information**

<table>
<thead>
<tr>
<th>Toxicty</th>
<th>Oral LD50</th>
<th>skin LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Fluorescein</td>
<td>9,721 mg/kg</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>4,200 mg/kg</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Adipic Acid</td>
<td>5,560 mg/kg</td>
<td>not available</td>
<td>not available</td>
</tr>
</tbody>
</table>

**Product toxicological information**

<table>
<thead>
<tr>
<th>Acute Toxicity</th>
<th>Not classified - Acute Toxicity Estimate yields oral LD₅₀ over 5000 mg/kg bw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irritation / Corrosion</td>
<td>No information found</td>
</tr>
<tr>
<td>Serious Eye Damage / Irritation</td>
<td>Category 1 - over 0.1% of ingredients classified as a Category 1</td>
</tr>
<tr>
<td>Respiratory / Skin Sensitization</td>
<td>No information found</td>
</tr>
</tbody>
</table>

dye
The Brightest Name in Safety

Germ Cell Mutagen
No information found
Carcinogen
No information found
Reproductive Toxicity
No information found
STOT - single exposure
Category 3 - respiratory over 20% of ingredients classified as a Category 3 respiratory STOT hazard
STOT - repeated exposure
No information found
Aspiration Hazard
No information found
Likely routes of exposure
Skin, ingestion, inhalation
Symptoms related to the physical, chemical and toxicological characteristics
No information found
Delayed and immediate effects and chronic effects from short and long term exposure
No information found
Interactive effects
No information found

12. Ecological Information

Ingredient toxicity / persistence / degradability / bioaccumulation / mobility in soil and water

Aquatic Toxicity
Sodium Fluorescein - LC50 Chorochyrenths mykiss (rainbow trout) - 1,372 mg/L - 96 h; EC50 - Daphnia pulex (Water flea) - 337 mg/L - 48 h
Sodium Bicarbonate - LC50 freshwater fish 8250 - 9000 mg/L - 96 h; EC50: freshwater algae 650 mg/L/120h; EC50: 750 water flea mg/L/48h
Adipic Acid - LC50 - 1,000 mg/L - 96 h; LC50 - Daphnia magna (Water flea) - 46 mg/L - 48 h; EC50 - Pseudokle嚇neriella subcapitata (algae) - 59 mg/L - 72 h
Bioaccumulation / Accumulation
Sodium Bicarbonate - Soluble in water Persistence is unlikely based on information available
Mobility in Environmental Media
Sodium Bicarbonate - Will likely be mobile in the environment due to its water solubility
Other adverse effects
No information found

13. Disposal Considerations (for spills and leakage)

Dispose of contaminated product, empty container and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures. This material is not considered to be a hazardous waste and no special disposal requirements are expected...

14. Transportation Information

Domestic & International
ID Number none
Shipping Name Non-hazardous
Hazard Class none
Packing Group none
EX Number none
Reportable Quantities none

Marine Pollutant: no
Special Precautions for User: No information available

15. Regulatory Information

US Regulations
Sodium Fluorescein (b) no no
Sodium Bicarbonate yes no no
Adipic Acid yes no no

US States
Sodium Fluorescein Prop 65 no yes
Sodium Bicarbonate no yes yes
Adipic Acid no yes yes

Canada
WHMIS yes
DSL Europe

Europe wgk

16. Other Information

Revision Information: June 2015

NFPA Rating
Flammability 2
Health 1
Reactivity 0

HMS Rating
Flammability 2
Health 1
Physical Hazard 0

Key / Legend:
NFPA: National fire protection association
CAS: Chemical Abstracts Service number
EIRED: European inventory of existing chemicals substances
OELW: Occupational Exposure Limit
NIOSH TLV: National Institute for Occupational Safety and Health
NTP: National Toxicology Program
WHO: World health organization
IARC: International Agency for Research on Cancer
TSCA: Toxic Substance Control Act
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act
CWA: Clean Water Act
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act
CWA: Clean Water Act
DSL: Domestic Substances List

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June 2015
SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
- Trade name: Activator for glow stick
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture TOI, PARTY ITEMS, DECORATION
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  XIAMEN LONG AFTERGLOW CO., LTD
  NO. 1043, TONG JI ZHONG ROAD, TONG AN DISTRICT, XIAMEN, CHINA
  Tel: 0592-3675699
  E-mail: yolanda@glow-novely.com
- Only Representative / other EU contact point Not available
- Further information obtainable from: XIAMEN LONG AFTERGLOW CO., LTD
- 1.4 Emergency telephone number:
  Yolanda Hu
  Tel: 0086-592-3675699
- UNITED KINGDOM
  National Poisons Information Service
  Tel: +44 (0) 844 892 0111
- 1.5 Reference number: SHTY150400006214-SH; SHATY1507843501

SECTION 2: Hazard identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    The product is not classified according to the CLP regulation.
  - Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
  - Information concerning particular hazards for human and environment:
    The product does not have to be labelled due to the calculation procedure of Regulation (EC) No 1272/2008.
  - Classification system:
- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008 Not applicable
  - Hazard pictograms Not applicable
  - Signal word Not applicable
  - Hazard-determining components of labelling: Not applicable
  - Hazard statements Not applicable
  - Precautionary statements Not applicable
- 2.3 Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable
    - vPvB: Not applicable

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
- Description:
  Mixture of the substances listed below with nonhazardous additions.
  For the wording of the listed risk phrases refer to section 16.
Safety data sheet  

Trade name: Activator for glow stick  

<table>
<thead>
<tr>
<th>Composition:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 131-11-3</td>
<td>dimethyl phthalate</td>
</tr>
<tr>
<td>EINECS: 205-011-6</td>
<td>substance with a Community workplace exposure limit 89.5%</td>
</tr>
<tr>
<td>CAS: 7732-18-5</td>
<td>water 8.2%</td>
</tr>
<tr>
<td>EINECS: 231-791-2</td>
<td></td>
</tr>
<tr>
<td>CAS: 7722-84-1</td>
<td>hydrogen peroxide</td>
</tr>
<tr>
<td>EINECS: 231-765-0</td>
<td>Index number: 006-003-00-9</td>
</tr>
<tr>
<td></td>
<td>R5</td>
</tr>
<tr>
<td></td>
<td>Ox. Liq. 1, H271; Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H332</td>
</tr>
</tbody>
</table>

**SECTION 4: First aid measures**

4.1 Description of first aid measures
A. After inhalation: Supply fresh air; consult doctor in case of complaints.
B. After skin contact:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
C. After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
D. After swallowing:
Rinse out mouth with water.
Never give anything by mouth to an unconscious person.
If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed: No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

**SECTION 5: Firefighting measures**

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture: No further relevant information available.

5.3 Advice for first responders
Protective equipment:
Wear fully protective suit.
Mouth respiratory protective device.

**SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Use respiratory protective device against the effects of flames/dust/aerosol.
Avoid contact with eyes.
Avoid contact with skin.

6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

(Contd. on page 3)
Safety data sheet

Trade name: Activator for glow stick

-.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

-7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Keep receptacles tightly sealed.
Keep away from heat and direct sunlight.
Prevent formation of aerosols.
Avoid contact with skin and eyes.
Information about fire - and explosion protection:
Protect from heat.
Keep respiratory protective device available.

-7.2 Conditions for safe storage, including any incompatibilities:
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Store only in the original receptacle.
Information about storage in one common storage facility:
Store away from foodstuffs.
Store away from flammable substances.
Furthet information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

-7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

-8.1 Control parameters
-Ingredients with limit values that require monitoring at the workplace:
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>E dot 1 dot 1-3 dimethyl phthalate</td>
<td>89.5%</td>
</tr>
<tr>
<td>WEL (Great Britain)</td>
<td>Short-term: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term: 5 mg/m³</td>
</tr>
<tr>
<td>VME (France)</td>
<td>Short-term: 5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term: 5 mg/m³</td>
</tr>
<tr>
<td>7722-84-1 hydrogen peroxide</td>
<td>2.3%</td>
</tr>
<tr>
<td>MAK (Germany)</td>
<td>Long-term: 0.71 mg/m³, 0.3 ppm</td>
</tr>
<tr>
<td>WEL (Great Britain)</td>
<td>Short-term: 2.8 mg/m³, 2 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term: 1.4 mg/m³, 1 ppm</td>
</tr>
<tr>
<td>VME (France)</td>
<td>Long-term: 1.5 mg/m³, 1 ppm</td>
</tr>
</tbody>
</table>

- DNEEs: Not applicable
- PNECs: Not applicable

-Additional information: The lists valid during the making were used as basis.

-8.2 Exposure controls
Based on composition shown in Section 3, the following measures are suggested for occupational safety measure:
-Appropriate engineering controls: See Section 7 for information about design of technical facilities.
-Personal protective equipment:
-Respiratory protection: Suitable respiratory protective device recommended.
Safety data sheet

Trade name: Activator for glow stick

- Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material:
The exact breakdown time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:

Tightly sealed goggles

- Environmental exposure controls:
Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance:
  - Form: Liquid
  - Colour: Transparent
  - Odour: Odourless
  - Odour threshold: Data not available.
  - pH-value: Data not available.
- Change in condition
  - Melting point/Melting range: Data not available.
  - Boiling point/Boiling range: Data not available.
  - Freezing point: Data not available.
- Flash point: Data not available.
- Flammability (solid, gaseous): Not applicable
- Auto-Ignition temperature: Data not available
- Decomposition temperature: Data not available.
- Self-igniting: Product is not self-igniting.
- Explosive properties: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Data not available.
  - Upper: Data not available.
- Oxidising properties Data not available.
- Vapour pressure: Data not available.

(Contd. on page 5)
Safety data sheet

Trade name: Activator for glow stick

- Density: Data not available.
- Relative density: Data not available.
- Vapour density: Data not available.
- Evaporation rate: Data not available.
- Solubility in / Miscibility with water: Data not available.
- Partition coefficient (n-octanol/water): Data not available.
- Viscosity:
  - Dynamic: Data not available.
  - Kinematic: Data not available.
- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity: No decomposition if used according to specification.
- 10.2 Chemical stability: Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity
  - LD/LC50 values relevant for classification:
    131-11-3 dimethyl phthalate
    Oral LD50: 6800 mg/kg (rat)
    Dermal LD50: >23800 mg/kg (rabbit)
    7722-84-1 hydrogen peroxide
    Oral LD50: 376 mg/kg (rat)
    Dermal LD50: 3000 mg/kg (rat)
    Inhalation LC50/4 h: 2 mg/l (rat)
  
  - Primary irritant effect:
  - Skin corrosion/irritation: Irritating effect possible.
  - Serious eye damage/irritation: Irritating effect possible.
  - Respiratory or skin sensitisation: Sensitisation possible.
  
  - Additional toxicological information:
    The product is not subjected to classification according to the calculation method based on the EU Directives 67/548/EEC, 1999/45/EC and Regulation 1272/2008/EC.
    - Toxicokinetics, metabolism and distribution: Data not available.
    - Acute effects (acute toxicity, irritation and corrosivity): Data not available.
    - Repeated dose toxicity: Data not available.
    - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Data not available.

(Contd. on page 6)
**SECTION 12: Ecological information**

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.
- 12.7 Additional ecological information:
  - General notes:
    Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**SECTION 13: Disposal considerations**

- 13.1 Waste treatment methods
  - Recommendation: Smaller quantities can be disposed of with household waste.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- 14.1 UN-Number
  - ADR, IMDG, IATA: Not applicable
- 14.2 UN proper shipping name
  - ADR, IMDG, IATA: Not applicable
- 14.3 Transport hazard class(es)
  - ADR, IMDG, IATA: Class Not applicable
- 14.4 Packing group
  - ADR, IMDG, IATA: Not applicable
- 14.5 Environmental hazards
  - Marine pollutant: No
- 14.6 Special precautions for user
  - Not applicable
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
  - Not applicable.

*UN “Model Regulation”:* (Contd. on page 7)
Safety data sheet

Printing date 21.05.2015
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Trade name: Activator for glow stick

(SECTION 15: Regulatory information)

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

- MAK (German Maximum Workplace Concentration)
  7722-84-1 hydrogen peroxide

- National regulations:
  - Water hazard: Water hazard class 1 (Self-assessment): slightly hazardous for water.

- Other regulations, limitations and prohibitive regulations
  - SVHC Candidate List of REACH Regulation Annex XIV Authorisation (17/12/2014)

  None of the ingredients is listed.

  - REACH Regulation Annex XVII Restriction (2/3/2015)

  None of the ingredients is listed.

  - REACH Regulation Annex XIV Authorization List (14/8/2014)

  None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(SECTION 16: Other information)

- Relevant phrases
  H271 May cause fire or explosion; strong oxidiser.
  H302 Harmful if swallowed.
  H314 Causes severe skin burns and eye damage.
  H332 Harmful if inhaled.
  R20/22 Harmful by inhalation and if swallowed.
  R35 Causes severe burns.
  R5 Heating may cause an explosion.
  R8 Contact with combustible material may cause fire.


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- Abbreviations and acronyms:
  ADR: Accident prone to le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  DINEL: Derived No-Effect Level (REACH)
  PNEC: Predicted No-Effect Concentration (REACH)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  Ox. Lis 1: Oxidising Liquids, Hazard Category 1
  Acute Tox. 4: Acute toxicity, Hazard Category 4
  Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

(Contd. on page 8)
Safety data sheet

Printing date 21.05.2015
Revision: 07.05.2015

Trade name: Activator for glow stick

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End of document
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: Chemiluminescer for green glow stick

1.2 Relevant identified uses of the substance or mixture and uses advised against
Application of the substance / the mixture TOY, PARTY ITEMS, DECORATION

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
XIAMEN LONG AFTERGLOW CO., LTD
NO. 1043, TONG JI ZHONG ROAD, TONG AN DISTRICT, XIAMEN, CHINA
Tel: 0592-3675899
E-mail: yolanda@glo-novely.com
Only Representative / other EU contact point Not available
Further information obtainable from: XIAMEN LONG AFTERGLOW CO., LTD

1.4 Emergency telephone number:
Yolanda Hu
Tel: 0086-592-3675899

UNITED KINGDOM
National Poisons Information Service
Tel: 4-4 (0) 844 892 0111

1.5 Reference number: SHTY/15040006246-SH; SHTY/1507841901

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi: Harmful
R22: Harmful if swallowed.

Xi: Irritant
R36/38: Irritating to eyes and skin.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of Regulation (EC) No 1272/2008.
Classification system:

2.2 Label elements
Labeling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to Regulation (EC) No 1272/2008.

Hazard pictograms

Signal word Warning

(Contd. on page 2)
Safety data sheet

Trade name: Chemiluminescer for green glow stick

- Hazard-determining components of labelling:
  - Hazard statements
    H302: Harmful if swallowed.
    H315: Causes skin irritation.
    H319: Causes serious eye irritation.
  - Precautionary statements
    P101: If medical advice is needed, have product container or label at hand.
    P102: Keep out of reach of children.
    P103: Read label before use.
    P280: Wear protective gloves/protective clothing/eye protection/face protection.
    P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    P312: Specific treatment (see on this label).
    P301+P330: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
    P332+P313: If skin irritation occurs: Get medical advice/attention.
    P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

- 2.3 Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable
    - vPvB: Not applicable

SECTION 3: Composition/Information on ingredients

- 3.2 Mixtures
  - Description:
    Mixture of the substances listed below with nonhazardous additions.
    For the wording of the listed risk phrases refer to section 16.

<table>
<thead>
<tr>
<th>CAS: 136-50-7</th>
<th>Butyl benzocate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 205-252-7</td>
<td>XI R22; XI R36/38</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319</td>
</tr>
</tbody>
</table>

| CAS: 7520-51-9 | Bis(2,3,5-trichloro-6-((pentyl)oxycarbonyl)phenyl) oxalate |
| EINECS: 278-124-1 | 14.0% |

| CAS: 10075-83-1 | 9,10-Bis(phenylvinyl)anthracene |
| EINECS: 217-286-3 | XI R36/37/38 |
|               | Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H305 |

SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - General information:
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  - After inhalation:
    Supply fresh air and to be sure call for a doctor.
    In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact:
    Immediately wash with water and soap and rinse thoroughly.
    If skin irritation continues, consult a doctor.
  - After eye contact:
    Rins opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    Rinse out mouth with water.

(Contd. on page 3)
## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

- **5.2 Special hazards arising from the substance or mixture**
  - No further relevant information available.

- **5.3 Advice for firefighters**
  - **Protective equipment:**
    - Wear fully protective suit.
    - Wear self-contained respiratory protective device.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - Wear protective equipment. Keep unproctected persons away.
  - Ensure adequate ventilation.
  - Keep away from ignition sources.
  - Use respiratory protective device against the effects of fumes/aerosol.
  - Avoid contact with eyes.
  - Avoid contact with skin.

- **6.2 Environmental precautions:**
  - Do not allow to enter sewers/ surface or ground water.

- **6.3 Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose of contaminated material as waste according to item 13.
  - Ensure adequate ventilation.

- **6.4 Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.
  - Keep receptacles tightly sealed.
  - Keep away from heat and direct sunlight.
  - Prevent formation of aerosols.
  - Avoid contact with skin and eyes.

- **Information about fire - and explosion protection:** Normal measures for preventive fire protection.

- **7.2 Conditions for safe storage, including any incompatibilities:**
  - Requirements to be met by storerooms and receptacles:
    - Store in a cool location.
    - Store only in the original receptacle.
  - Information about storage in one common storage facility:
    - Store away from foodstuffs.
    - Store away from flammable substances.
    - Store away from oxidising agents.

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Safety data sheet

Printing date 21.05.2015
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Trade name: Cheniluminescer for green glow stick

Do not store together with alkaline materials.
- Further information about storage conditions:
  Keep container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
  Ingredients with limit values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values that have to be
  monitored at the workplace.
  - DNELs: Not applicable
  - PNECs: Not applicable
- Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
  - Based on composition shown in Section 3, the following measures are suggested for occupational safety
    measure:
    - Appropriate engineering controls:
      Keep away from foodstuffs, beverages and feed.
      Immediately remove all soiled and contaminated clothing
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
      See Section 7 for information about design of technical facilities.
  - Personal protective equipment:
    - Respiratory protection:
      In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure
      use self-contained respiratory protective device.
    - Protection of hands:

  Protective gloves

  The glove material has to be impermeable and resistant to the product/the substance/the preparation.
  Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the
  chemical measure.
  Selection of the glove material on consideration of the penetration times, rates of diffusion and the
  degradation
  - Material of gloves:
    The selection of the suitable gloves does not only depend on the material, but also on further marks of quality
    and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the
    resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the
    application.
    - Penetration time of glove material:
      The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be
      observed.
    - Eye protection:

  Tightly sealed goggles

  (Cond. on page 5)
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour:</td>
<td>Green</td>
</tr>
<tr>
<td>Odour:</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Data not available</td>
</tr>
<tr>
<td>pH-value:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Freezing point:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
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</tr>
<tr>
<td>Auto-Ignition temperature:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Date not available</td>
</tr>
<tr>
<td>Self-igniting:</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosive properties:</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Upper:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Oxidising properties:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Density:</td>
<td></td>
</tr>
<tr>
<td>Relative density:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water:</td>
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</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
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</tr>
<tr>
<td>Viscosity:</td>
<td></td>
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<tr>
<td>Dynamic:</td>
<td>Data not available</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Data not available</td>
</tr>
<tr>
<td>9.2 Other information:</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

- 10.1 Reactivity: No decomposition if used according to specification.
- 10.2 Chemical stability: Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 10.5 Incompatible materials: Strong oxidizing agents, Strong bases
SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity
- LD/LC50 values relevant for classification:
  - 136-60-7 butyl benzate
    - Oral: LD50 735 mg/kg (rat)
    - Dermal: LD50 4000 mg/kg (rabbit)
- Primary irritant effect:
  - Skin corrosion/irritation: Irritant to skin and mucous membranes.
  - Serious eye damage/irritation: Irritating effect.
  - Respiratory or skin sensitisation: Sensitisation possible.
- Additional toxicological information:
  - The product is not subjected to classification according to the calculation method based on the EU Directives 67/548/EEC, 1999/45/EC and Regulation 1272/2008/EC.
  - Harmful.
  - Toxikokinetics, metabolism and distribution: Data not available
  - Acute effects (acute toxicity, irritation and corrosivity): Data not available
  - Repeated dose toxicity: Data not available
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Data not available

SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability: No further relevant information available.
- 12.3 Bioaccumulative potential: No further relevant information available.
- 12.4 Mobility in soil: No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects: No further relevant information available.
- 12.7 Additional ecological information:
  - General notes:
    - Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
    - Do not allow product to reach ground water, water course or sewage system.
    - Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation
  - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  - (Contd. on page 7)
### SECTION 14: Transport information

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ADR, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ADR, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ADR, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of MARPOL/23/76 and the IBC Code</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN “Model Regulation”</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - MAK (German Maximum Workplace Concentration)
    - None of the ingredients is listed.
  - National regulations:
    - Water: Water hazard class 2 (Self-assessment): hazardous for water.
  - Other regulations, limitations and prohibitive regulations
  - SVHC Candidate List of REACH Regulation Annex XIV Authorisation (17/12/2014)
    - None of the ingredients is listed.
  - REACH Regulation Annex XVII Restriction (2/3/2015)
    - None of the ingredients is listed.
  - REACH Regulation Annex XIV Authorisation List (14/8/2014)
    - None of the ingredients is listed.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

- Relevant phrases:
  - H302 Harmful if swallowed.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - R22 Harmful if swallowed.
  - R36/38 Irritating to eyes and skin.

(Contd. on page 8)
Trade name: Chemiluminescer for green glow stick


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DATS: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ELINCS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service Registry Number of the American Chemical Society
PNEC: Predicted No-Effect Concentration (REACH)
LD50: Lethal concentration, 50 percent
LC50: Lethal concentration, 50 percent
ACN: Acute Nase, Hazard Category 4
Skin Irrit. 1: Serious eye damage/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/irritation, Hazard Category 2

End of document.