SAFETY DATA SHEET

1. Product and Company Identification

Skyblazer II, XLT and XLT, Twin SAR Red Aerial Signal
Orion Safety Products
3157 North 500 West
Peru, IN 46970

Use: Emergency signal

Phone Number: US 1-800-851-5260
Intl (11) 1-765-472-4375
EMERGENCY CHEMTREC 1-800-424-9300

2. Hazards Identification

Hazard Statements:
- Fire or projection hazard
- Causes severe skin burns and eye damage (product when burning)
- Causes skin and eye irritation (contents)
- Harmful if inhaled or swallowed

Precautionary Statements:
- Keep out of reach of children.
- Keep away from heat/sparks/open flames/hot surfaces. – no smoking.
- Keep dry.
- Keep cool. Do not expose to temperatures exceeding 167°F
- Avoid breathing dust/smoke
- Use only outdoors. Do not ignite inside a building, vehicle or boat cabin.
- Wear eye protection.
- Do not dismantle.
- In case of fire: use water deluge. Do not use dry powder or foam extinguishers!

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>Strontium Nitrate</td>
<td>10042-76-9</td>
<td>233-131-9</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>Magnesium</td>
<td>7439-95-4</td>
<td>231-104-6</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>Strontium Peroxide</td>
<td>1314-18-7</td>
<td>215-224-6</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>Polyvinyl chloride</td>
<td>9002-86-2</td>
<td>none</td>
<td>&lt;20%</td>
</tr>
<tr>
<td>Black Powder mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>&lt;20%</td>
</tr>
<tr>
<td>Dextrin</td>
<td>9004-53-9</td>
<td>232-675-4</td>
<td>&lt;20%</td>
</tr>
<tr>
<td>Primer mixture</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Inhalation
- If smoke or contents are inhaled, remove to fresh air. If not breathing, give artificial respiration and get medical aid.
- For burns, cool with water and bandage appropriately. If contents are contacted, wash with area with soap and water for 15 minutes. Remove contaminated clothing and wash before reuse. Get medical aid if burned or irritation occurs.
- If burned, cover eye and get medical help immediately. If smoke or contents get into eye, flush with plenty of water for at least 15 minutes, occasionally lifting the up and lower lids. Remove contact lenses if easily possible Get medical aid immediately.

Skin
- Do not breathe smoke or contents and avoid contact with skin and eyes. Wear flame retardant clothing with long sleeves, dust mask, rubber or nitrile gloves, safety goggles, safety shoes when cleaning up contents. Avoid friction on the released product. Keep away from ignition sources. Contains strong dyes which will color all exposed areas.

Eyes
- Get medical aid immediately.

Ingestion

5. Firefighting Measures

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 face piece operated in the pressure demand or other positive pressure mode. Prevent further propagation of fire by spraying unburnt nearby product with water. Combat fire from a sheltered position.

Specific Hazards Arising from the Chemical
- Only use outdoors. Use copious amounts of water to extinguish fire. Using small quantities of water on contents / broken product can cause auto / re-ignition as contents contain magnesium. Use of water on a magnesium fire will generate hydrogen gas that may cause an explosion. Irritating fumes. Flaming projectiles may be ejected during a fire. Trace amounts of lead vapor may be produced (from ignition primer) in a fire situation.

Flashpoint
- Not Applicable

Flammability Limits
- Not Applicable

Ignition Temperature
- >180°F

6. Accidental Release Measures

Personal Precautions

Environmental Precautions
- Prevent dispersion of contents on soil and in water. Prevent contents from spreading or entering into drains, ditches, groundwater or rivers by using appropriate barriers.
Methods for Containment and Clean-up

Use caution when cleaning up spilled product contents. Remove heat, flames, sparks and other sources of ignition. Use non-sparking tools and equipment. Prevent buildup of electrostatic charges by grounding. Clean spills in a manner that does not disperse dust into the air. Do not absorb in sawdust or other combustible absorbents. Pick up spill for recovery or disposal and place in an approved container. Wash away remainder with plenty of water. Collect wash water for approved disposal. Be very careful - magnesium powder may spontaneously ignite in presence of moisture. Magnesium powder reacts with water, producing flammable hydrogen gas.

7. Handling and Storage

Handling

Point product away from body, other people, animals or combustible products when firing. Wear appropriate eye protection when using. Follow instructions on package! Do not disassemble signal. Avoid contact with clothing and other combustible materials. Use outdoors only. Do not remove bottom cap unless you are outdoors and preparing to activate signal. Do not ignite or launch product inside a vehicle, boat cabin, or building. Avoid ingestion and inhalation of smoke and contents. Wash thoroughly after handling. Avoid contact with heat, sparks, and flame.

Storage

Store in a cool area out of direct sunlight. Do not allow long-term exposure to temperatures in excess of 180°F. Avoid long-term immersion in water, exposure to moisture, open flames or extremely high temperature. Store away from flammable materials, sources of heat, flame and sparks. Do not store partially burned signals in a vehicle, boat, closed container, warehouse, or any other building.

8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Exposure Limits</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strontium Nitrate</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Magnesium</td>
<td>unknown</td>
<td>unknown</td>
</tr>
<tr>
<td>Strontium Peroxide</td>
<td>nusance dust 15 mg/m³</td>
<td>nusance dust 15 mg/m³</td>
</tr>
<tr>
<td>Polyvinyl chloride</td>
<td>5mg/ml for the respirable portion and 15mg/ml for total dust.</td>
<td>5 and 10mg/ml, respectively</td>
</tr>
<tr>
<td>Black Powder</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Dextrin</td>
<td>15 mg/m³ total dust</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

Engineering Controls

Use product outdoors only! When cleaning up contents, use local and/or general exhaust.

Eye / Face Protection

Turn face from product when firing. Wear safety glasses or goggles during use and when cleaning up spilled contents. None under normal conditions when using product unless prolonged handling is anticipated. Contains strong dyes which will color all exposed areas. When cleaning up spilled contents, wear full length impervious protective clothing, including gloves, boots, and a lab coat, apron or coveralls, as appropriate. Wash hands and face before eating, drinking or using tobacco products.

Respiratory Protection

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

General Hygiene

Use product outdoors away from combustible products. For cleanup of spilled contents, emergency showers and eye wash stations should be available. 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>Properties</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (color, physical form, shape):</td>
<td>Orange plastic tube.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>&gt;500°F</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Slight</td>
</tr>
<tr>
<td>Freezing Point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Chemical Stability

Stable

Conditions to Avoid

Excessive temperatures, moisture, water, acids. Exposure of the signal to temperatures in excess of 180°F may cause weakening of the signal body. Avoid open flames, extremely high temperatures, wet conditions, and ignition sources.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Incompatible Materials

Strong oxidizers, strong acids, oxidizing or reducing agents. Liquid acids of any kind. Hydrogen Fluoride, Hydrogen Peroxide, and other strong oxidizing agents. Avoid exposure to organic solvents which might weaken the signal body.

Hazardous Decomposition Products

Carbon monoxide, Nitrous oxides, Carbon dioxide. Magnesium hydroxides and oxides.

11. Toxicology Information

<table>
<thead>
<tr>
<th>Toxicology</th>
<th>Oral LD50</th>
<th>skin LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strontium Nitrate</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Strontium Peroxide</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Polyvinyl chloride</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Black Powder</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Dextrin</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>
Acute Dose Effects
Burning signal can cause severe burns if in contact with body - product burns at an extremely high temperature. Particles from firing may be harmful if inhaled. Contact with contents may cause moderate skin and eye irritation. Inhalation of smoke or contents will cause irritation to the lungs and mucus membrane. Exposure to smoke during use may aggravate asthma if inhaled.

Repeated Dose Effects
No known chronic effects. Repeated or prolong exposure to this compound is not known to aggravate medical conditions.

Corrosivity
May cause eye or skin burns if in contact with burning signal.

Carcinogenicity
No information found

Reproductive Effects
No information found

Genetic Effects
No information found

Neurological Effects
No information found

Developmental Effects
No information found

Sensitization
No information found

Target Organ Effects
Eye, skin, and lungs

12. Ecological Information

Aquatic Toxicity
Persistence / Degradability
Bioaccumulation / Accumulation
Mobility in Environmental Media
Strontium Nitrate: Acute toxicity - Fishes, Carassius auratus, LC100, 9,615 mg/l; Chronic toxicity - Fishes, Gasterosteus aculeatus, LC100, 2,912 mg/l
No information found
No information found
No information found

13. Disposal Considerations (for spills and leakage)
Dispose of contaminated product and materials used in cleaning up spills or leaks in the manner approved for pyrotechnic material. Consult appropriate federal, state, and local regulatory agencies to ascertain proper disposal procedures. Open burning is preferred method of disposal for pyrotechnic materials.

14. Transportation Information

<table>
<thead>
<tr>
<th>United States &amp; International</th>
<th>shipping name</th>
<th>hazard class</th>
<th>ID Number</th>
<th>packing group</th>
<th>EX Number</th>
<th>Reportable Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flares, aerial</td>
<td>1.4G</td>
<td>UN0403</td>
<td>n/a</td>
<td>XLT &amp; SAR - EX2002110107 TWIN - EX2002110148</td>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>

15. Regulatory Information

<table>
<thead>
<tr>
<th>US Regulations</th>
<th>TSCA</th>
<th>CERCLA</th>
<th>CWA</th>
<th>CAA</th>
<th>SARA 313</th>
<th>SARA 302</th>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strontium Nitrate</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Magnesium</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Strontium Peroxide</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Polyvinyl chloride</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Black Powder</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dextrin</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>US States</td>
<td>Prop 65</td>
<td>NJ</td>
<td>PA</td>
<td>Canada</td>
<td>WHMIS</td>
<td>DSL</td>
<td>Europe</td>
<td>wgk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strontium Nitrate</td>
<td>no</td>
<td>1743</td>
<td>no</td>
<td>Canada</td>
<td>No results</td>
<td>yes</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td>no</td>
<td>1136</td>
<td>yes</td>
<td>no</td>
<td>No results</td>
<td>yes</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strontium Peroxide</td>
<td>no</td>
<td>1745</td>
<td>no</td>
<td>no</td>
<td>No results</td>
<td>yes</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyvinyl chloride</td>
<td>no</td>
<td>3622</td>
<td>no</td>
<td>no</td>
<td>No results</td>
<td>yes</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Powder</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td>mixture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dextrin</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>No results</td>
<td>yes</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Other Information

Revision Information: October 2016

Risk and Safety Phrases:
R12 Flammable
R38 Irritating to skin (contents)
R21 Harmful in contact with skin
R22 Harmful if swallowed
R36 Irritating to eyes
R37 Irritating to respiratory system
S17 Keep away from combustible material
S18 Keep away from sources of ignition
S2 Keep out of the reach of children

Legal Statement:
This information is accurate to the best knowledge Orion Safety Products. Orion Safety Products makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability or fitness for a particular purpose, with respect to the information set forth herein or the product to which the information relates. Accordingly, Orion Safety Products will not be responsible for damages resulting from use of or reliance upon this information. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.