SAFETY DATA SHEET

EFFECTIVE DATE: 06/06/17

ITEM: Premium Flare Emergency Kit

PART #     UPC
8907       039147089074

CONTENTS:
Alcohol Prep / Swab SDS
Antiseptic Towelette SDS
Red Emergency Flare SDS
Lightstick SDS
Moist Towelette SDS
Sting and Bite Pad SDS
SAFETY DATA SHEET

SECTION 1. Product and Company Identification

PRODUCT NAME: Alcohol Preparation Pads/Swab
RECOMMENDED USE: Topical skin antiseptic
Product Code: AM-20200, 1113, 1114, 1116, PK-1114
Manufacturer’s Name: Dynarex Corporation
Manufacturer’s Address: 10 Glenshaw Street
Orangeburg, NY 10962
Emergency or Information Phone No.: 888-DYNAREX or 845-365-8200
At other times, contact the local Poison Control Center

SECTION 2. Hazards Identification

Main Hazards:
Highly flammable; irritation to eyes; vapor may cause drowsiness and dizziness

Absorption:
Eye contact; ingestion; inhalation; skin contact

Carcinogenic Status:
Not considered carcinogenic by NTP, IARC, and OSHA

Target Organs:
Central nerves system; skin; eye; liver; respiratory system

Health Effects:
Eyes – Liquid, mist or vapor will cause conjunctival irritation and possible corneal damage.

Skin – Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Liquid may be absorbed through the skin but not in toxicologically significant amounts, unless the contact area is large and under prolonged exposure.

Ingestion – Swallowing a small amount may have the effect of any of these symptoms: irritation of mouth, throat, digestive tract, and central nerves system depression.

Ingestion – A large dose may have the effect of any of these symptoms: dizziness, drowsiness, headache, mental confusion, nerve damage leading to numbness and muscle weakness, fall of blood pressure, liver damage, lung damage.

Inhalation – Exposure to vapor may have the effect of any of these symptoms: irritation of nose, throat and respiratory tract, central nerve system depression.

Inhalation – Exposure to vapor at high concentration may have the effects of any of these symptoms: dizziness, drowsiness, headache, mental confusion, lung damage, fall of blood pressure, liver damage, nerve damage leading to numbness and muscle weakness.

**SECTION 3. Composition/information on Ingredients**

<table>
<thead>
<tr>
<th>Hazardous Ingredients (specific)</th>
<th>% Composition</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol (2-Propanol)</td>
<td>70%</td>
<td>67-63-0</td>
</tr>
<tr>
<td>Inactive Ingredient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>30%</td>
<td>7732-18-5</td>
</tr>
</tbody>
</table>
SECTION 4. First-aid measures

**Eyes:**
Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin:**
Immediately flood the affected skin area with large quantity of water, preferably under a shower. Remove contaminated clothing and continue washing. Contaminated clothing should be washed thoroughly before re-use. Obtain medical attention if blistering of the skin occurs or redness persists.

**Ingestion:**
Do not induce vomiting. Have victim drink several large glasses of water to dilute the stomach contents. Give the victim oxygen if he/she has difficulty in breathing. Obtain medical attention immediately.

**Inhalation:**
Remove the victim from exposure immediately. Give the victim oxygen if he/she has difficulty in breathing. Obtain medical attention immediately.

**MEDICAL PERSONNEL:**
Monitor the victim for systemic secondary effects on liver and kidney functions. Support and treat as appropriate.

SECTION 5. Fire-fighting measures

**Flash Point** – 20°C/68°F

**Boiling Point** – 80°C/176°F
Extinguishing Media –  Dry Chemical or Alcohol Type Foam, Carbon Dioxide

Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.

Unusual Fire and Explosion Hazards –  
Class 3 Flammability. Vapor can travel a considerable distance to a source of ignition and flashback. Flashback can occur if air temperature exceeds flash point. Be aware the possibility of re-ignition.

Special Fire Fighting Procedures –  
Handle as Flammable Liquid. Use Respiratory Protection. Wear full protective clothing for Fire Fighting Personnel.

SECTION 6. Accidental release measures

- Flush spills with water.
- Contain and absorb using soil, sand, or other inert material.
- Vapor can accumulate in low areas. Consider the need for evacuation.
- Prevent the material from entering drains or water courses.

SECTION 7. Handling and storage

- Eliminate all sources of ignition. Store away from heat.
- Store in well ventilated area.
- Handle as flammable liquid. Follow local, state and federal regulations.
- Avoid inhaling vapor. Avoid contact with eyes, skin and clothing.
- Wear eye protection if splashing is expected.
- Wear appropriate protective clothing.
- Use respirator if exposure level is high when handling bulk liquid.
- Keep container tightly closed when not in use.
SECTION 8. Exposure controls/personal protection

- OSHA Occupation Exposure Standards PEL 400ppm (980mg/m³) 8h TWA
- UK EH40: OES 400ppm (980mg/m³) 8h TWA
- UK EH40: OES 500ppm (1225mg/m³) 15min TWA
- ACGIH: TLV 200ppm (980mg/m³) 8h TWA
- ACGIH: STEL 400ppm (1225mg/m³) 15min TWA
- Personal Protective Equipment
  - Gloves
  - Eye
  - Clothing

SECTION 9. Physical and chemical properties

- Appearance – Liquid Saturated Towelette / Pad / Swab
- Color – Clear
- Odor – Alcohol
- Vapor Density – 2.1 (Air = 1)
- Viscosity (cSt) – 2.9 cps at <@2> °C

Evaporation Rate – Environmental Dependent
Water Solubility – Complete
Specific Gravity – 0.8405

SECTION 10. Stability and reactivity

- Stability – Stable under normal conditions
- Conditions to Avoid – None
- Incompatibility – None
- Hazardous Decomposition or By-product – Oxides of carbon
Polymerization – Will Not Occur.

SECTION 11. Toxicological information

Acute Toxicity

- Low level of acute toxicity predicted.
- May be harmful by skin absorption.
- Oral LD50 (rat) 5045mg/kg.
- Dermal LD50 (rabbit) 12800mg/kg.
- Inhalation LC50 (rat) 1600ppm 4h.

Chronic Toxicity / Carcinogenicity

- Material not expected to cause long-term adverse health effects.
- Material not classifiable as to its carcinogenicity to humans (Group 3).
- Chronic / Sub-chronic studies resulted in adverse effects to:
  - Liver, spleen, biochemical effects, brain tissue degeneration, changes in reflex behavior, sensory nerve damage.

Genealogy Toxicity

- Material is not expected to cause any mutagenic effects.

Reproductive / Developmental Toxicity

- Material is not expected to cause reproductive or developmental health effects.
- Experimental studies in animals have provided some evidence of embryo / fetus toxicity and birth defects only at doses producing marked maternal toxicity.

SECTION 12. Ecological information

- Mobility
If released to soil, IPA is expected to have very high mobility
Persistence / Degradability
IPA is readily degraded in aerobic aqueous systems
Bio-accumulation

Low potential for bio-concentration in aquatic organisms

SECTION 13. Disposal considerations

Transfer into suitable containers for recovery or disposal.
Dispose in accordance with all applicable local and national regulations.
Do not remove labels from container until the container has been cleaned.
Do not cut, puncture or weld on or near the container.
Do not incinerate closed containers.
Empty containers may contain hazardous residues

SECTION 14. Transport information

DOT CFR 172.101
Not regulated per 49 CFR 173.4 Small Quantity Exemption

SECTION 15. Regulatory information

This product is compliant with the following:

EU Label: Classification and labeling have been performed according to EU Directive 67/548/EEC and 99/45/EC including amendments
EU Hazard Symbol and Indication of Danger
F – Highly flammable
Xi – Irritant
R11 – Highly flammable
• R36 – Irritating to eyes
• R67 – Vapors may cause drowsiness and dizziness
• S2 – Keep out of reach of children
• S7 – Keep container tightly closed
• S16 – Keep away from sources of ignition – No smoking
• S24 / S25 – Avoid contact with skin and eyes
• S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
• US (Federal and State) Regulations and International Chemical Registration Laws TSCA listing
• This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Inventory
• This product does not contain any chemicals subject to EPA Title III of the SARA Listing in Sections 302 and 304
• All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substance (EINECS Listing) or are exempted from listing
• All ingredients in this product are listed on the Canada Domestic Substance List (DSL Listing)

SECTION 16. Other information
Disclaimer:
This Safety Data Sheet, which takes into consideration the requirements of Directive 76/768/EC and subsequent amendments and Directive 1999/45/EC plus subsequent amendments, has been prepared in accordance with Directive (EC) 1907/2006. It is believed to be correct and corresponds to the latest scientific/technical knowledge but all data, instructions, recommendations and/or suggestions are made without guarantee. No warranty, expressed or implied, is made and Dynarex Corp. assumes no legal responsibility or liability resulting from its use.
SAFETY DATA SHEET

SECTION 1. Product and Company Identification

PRODUCT NAME: BZK Antiseptic Towelette
PRODUCT USE: Antiseptic

Product Code: 1303, 1331
Manufacturer's Name: Dynarex Corporation
Manufacturer's Address: 10 Glenshaw Street
Orangeburg, NY 10962
Emergency or Information Phone No.: 888-DYNAREX or 845-365-8200
At other times, contact the local Poison Control Center

SECTION 2. Hazards Identification

Emergency Overview
Contact with liquid may cause eye and skin irritation

Potential short term health effects

Routes of exposure
Eye, skin contact, skin absorption, Inhalation, Ingestion.

Eyes
May cause irritation.

Skin
In case of skin irritation, discontinue use of the product.

Inhalation
Not a normal route of exposure. May cause respiratory tract irritation.

Ingestion
Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
Target organs

Eyes. Skin

Chronic effects

Prolonged or repeated exposure can cause drying defatting and dermatitis.

Signs and symptoms

Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea.

SECTION 3. Composition/information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BZK</td>
<td>8001-54-5</td>
<td>0.13</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>99.87</td>
</tr>
</tbody>
</table>

SECTION 4. First-aid measures

First aid procedures

Eye Contact

Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

Skin Contact

In case of skin irritation, discontinue use of product.

Inhalation

Not a normal route of exposure. If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion

Not a normal route of exposure. Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Notes to physician

Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep out of reach of children. Avoid contact with eyes.

Flammable Limits: N/A

Flash Point: N/A

SECTION 5. Fire-fighting measures

Flash Point: Not Available
Flammable Limits: Not Available
Extinguishing Media: Any
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: None

SECTION 6. Accidental release measures

Personal precautions: Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Methods for containment: Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up: Pick up and discard towel.

SECTION 7. Handling and storage

Handling: Use good industrial hygiene practices in handling this material.

Storage: Keep out of reach of children. Store in a closed container away from incompatible materials.
SECTION 8. Exposure controls/personal protection

Engineering controls: General ventilation normally adequate.

Personal protective equipment

Eye/Face protection Follow standard industrial hygiene practices.
Hand protection Not required.
Skin and body protection As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use and approved NIOSH respirator.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

SECTION 9. Physical and chemical properties

Appearance/Odor: Liquid saturated on wipe
Color: Clear liquid
Form: Liquid saturated on wipe
Odor: Characteristic
Odor Threshold: Not available
Physical State: Solid
Boiling Point: <200°F
Paper Components: 100% Virgin Paper
Specific Gravity: 1

SECTION 10. Stability and reactivity

Chemical Stability: Stable under recommended storage conditions.
Hazardous Decomposition Products: May include and are not limited to: oxides of carbon; hydrogen chloride.

Hazardous Polymerization: Will not occur.

Conditions to avoid: Do not mix with other chemicals.

SECTION 11. Toxicological information

Effects of acute exposure

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye</td>
<td>May cause irritation</td>
</tr>
<tr>
<td>Skin</td>
<td>In case of skin irritation, discontinue use of the product.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Not a normal route of exposure. May cause respiratory tract irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Not a normal route of exposure. May cause stomach distress, nausea or vomiting.</td>
</tr>
</tbody>
</table>

Sensitization Non-hazardous by WHMIS/OSHA criteria.

Chronic Effects Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity Non-hazardous by WHMIS/OSHA criteria.

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive Effects Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

SECTION 12. Ecological information

Ecotoxicity Not available

Environmental effects Not available

Aquatic toxicity Not available

Persistence / degradability Not available

Bioaccumulation / accumulation Not available
Partition coefficient Not available

Mobility in environmental media Not available

Chemical fate information Not available

Other adverse effects Not available

SECTION 13. Disposal considerations

Waste codes: Not available

Disposal instructions: Discard after single use.
Review federal, state/provincial, and local government requirements prior to disposal.
Discard with solid waste. Dispose in accordance with all applicable regulations.

Waste from residues / unused products: Not available

Contaminated packaging: Not available

SECTION 14. Transport information

U.S. Department of Transportation (DOT) Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada) Not regulated as dangerous goods.

SECTION 15. Regulatory information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US Federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200 hazardous No chemical

CERCLA (Superfund) reportable quantity
Benzene: 10.0000
Benzene, methyl-: 1000.0000
Benzene, (chloromethyl)-: 100.0000
Propylene oxide: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

Safe Drinking Water Act (SDWA) Not available

Drug Enforcement Agency (DEA) Not available

Food and Drug Administration (FDA) Not available

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

SECTION 16. Other information
Disclaimer:
This Safety Data Sheet, which takes into consideration the requirements of Directive 76/768/EC and subsequent amendments and Directive 1999/45/EC plus subsequent amendments, has been prepared in accordance with Directive (EC) 1907/2006. It is believed to be correct and corresponds to the latest scientific/technical knowledge but all data, instructions, recommendations and/or suggestions are made without guarantee. No warranty, expressed or implied, is made and Dynarex Corp. assumes no legal responsibility or liability resulting from its use.
1. Identification

(a) Product identifier
Product name: Fluorescent material

(b) Other means of identification
Product description: GLOW STICK, GLOW BRACELET, GLOW NECKLACE, GLOW CUP, GLOW WAND WITH ASST COLORS RED/GREEN/BLUE/YELLOW/PINK/ORANGE/PURPLE/WHITE/AQUA

(c) Recommended use of the chemical and restrictions on use
Recommended use: Used in decoration.
Restriction on use: No information available.

(d) Details of the supplier of the product
Company name: Xiamen Long Afterglow Co., Ltd
Address: NO.1043, Tong Ji Road, Tong An Area, Xiamen, Fujian Province, China
E-mail: Tommy@glo-noveltv.com
Telephone: +86-592-3675699
Fax: +86-592-3675400

(e) Emergency phone number
+86-592-3675699

2. Hazard(s) identification

(a) Classification of the chemical
This product is not classified as hazardous.

(b) Label elements
This product is not classified as hazardous.
Pictogram(s): No pictogram is used.
Signal word: No signal word is used.
Hazard statements: No hazard statements.
Precautionary statements: No precautionary statements.

(c) Description of any hazards not otherwise classified
No information available.

(d) Ingredient with unknown acute toxicity
No information available.
3. Composition/information on ingredients

(a) Mixtures information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Phthalate</td>
<td>131-11-3</td>
<td>58.5%</td>
</tr>
<tr>
<td>Butyl Benzoate</td>
<td>136-60-7</td>
<td>28.5%</td>
</tr>
<tr>
<td>CPPO</td>
<td>75203-51-9</td>
<td>4.7%</td>
</tr>
<tr>
<td>Hydrogen Peroxide</td>
<td>7722-84-1</td>
<td>2.2%</td>
</tr>
<tr>
<td>H2O</td>
<td>7732-18-5</td>
<td>6.0%</td>
</tr>
<tr>
<td>Fluorescer</td>
<td>10075-85-1</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

4. First-aid measures

(a) Description of first aid measures

Inhalation: Move to fresh air in case of accidental inhalation of vapours or decomposition products. If you feel unwell, seek medical advice.

Skin contact: Wash off with soap and plenty of water. If skin irritation persists, call a physician.

Eye contact: Rinse with plenty of water immediately, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

Ingestion: Rinse mouth. Do not induce vomiting. Call a physician immediately.

(b) Most important symptoms/effects, acute and delayed

No information available.

(c) Immediate medical attention and special treatment

Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

(a) Extinguishing media

Suitable extinguishing media: Use carbon dioxide, dry extinguishing media, water spray, water.

Unsuitable extinguishing media: No information available.

(b) Special hazards arising from the chemical

Combustion produces toxic or irritating gases and fumes.

(c) Special protective equipment and precautions for fire-fighters

Firefighters must wear fire resistant protective equipment. Wear self-contained breathing apparatus.
6. Accidental release measures

(a) Personal precautions, protective equipment and emergency procedures
Handle in accordance with good industrial hygiene and safety practice.

(b) Methods and materials for containment and cleaning up
For large amounts: Transfer product into suitable containers.
For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations

7. Handling and storage

(a) Precautions for safe handling
Ensure thorough ventilation of stores and work areas.

(b) Conditions for safe storage, including any incompatibilities
Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

8. Exposure controls/personal protection

(a) Control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PEL-TWA</td>
<td>PEL-STE</td>
</tr>
<tr>
<td>131-11-3</td>
<td>5 mg/m³</td>
<td>Not Established</td>
</tr>
<tr>
<td>136-60-7</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>75203-51-9</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>7722-84-1</td>
<td>1.4 mg/m³</td>
<td>Not Established</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>10075-85-1</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

(b) Appropriate engineering controls
Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

(c) Personal protective equipment
Respiratory protection: The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.
50 mg/m³
Any air-purifying full-facepiece respirator equipped with an N95, R95, or P95 filter. The following filters may also be used: N99, R99, P99, N100, R100 or P100.
125 mg/m³
Any supplied-air respirator operated in a continuous-flow mode.
Any powered, air-purifying respirator with a high-efficiency particulate filter.
250 mg/m³
Any air-purifying, full-facepiece respirator equipped with an N100, R100, or P100 filter.
Any self-contained breathing apparatus with a full facepiece.
Any supplied-air respirator with a full facepiece.
2000 mg/m³
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.
Emergency or planned entry into unknown concentrations or IDLH conditions
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.
Escape
Any air-purifying, full-facepiece respirator equipped with an N100, R100, or P100 filter.
Any appropriate escape-type, self-contained breathing apparatus.

Hand protection: Wear appropriate chemical resistant gloves.
Eye/face protection: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
Skin/body protection: Wear appropriate chemical resistant clothing.

9. Physical and chemical properties

| (a) Appearance | Liquid |
| (b) Odor | Not available. |
| (c) Odor threshold | Not available. |
| (d) pH | Not available. |
| (e) Melting point/freezing point | Not available. |
| (f) Initial boiling point and boiling range | Not available. |
Safety Data Sheet
According to HCS-2012 APPENDIX D TO §1910.1200

Fluorescent material

(g) Flash point >200ºF (93.3ºC) Closed Cup
(h) Evaporation rate Not available.
(i) Flammability No
(j) Upper/lower flammability or explosive limits Not available.
(k) Vapor pressure Not available.
(l) Vapor density Not available.
(m) Relative density Not available.
(n) Solubility(ies) Not available.
(o) Partition coefficient: n-octanol/water Not available.
(p) Auto-ignition temperature Not available.
(q) Decomposition temperature Not available.
(r) Viscosity Not available.

10. Stability and reactivity

(a) Reactivity
Stable under recommended storage and handling conditions (see section 7, handling and storage).

(b) Chemical stability
Stable under normal conditions.

(c) Possibility of hazardous reactions
Will not polymerize.

(d) Conditions to avoid
Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

(e) Incompatible materials
Acids, bases, oxidizing materials.

(f) Hazardous decomposition products
Carbon monoxide (CO), carbon dioxide (CO₂) and other toxic vapors.

11. Toxicological information

(a) Information on the likely routes of exposure
Inhalation: Not available.
Ingestion: Not available.
Skin contact: Not available.
Eye contact: Redness.
(b) Information on toxicological characteristics

Acute toxicity:  
- 131-11-3 Oral LD50 Rat 6800 mg/kg (Source: IUCLID)
- 136-60-7 No data available.
- 75203-51-9 No data available.
- 7722-84-1 Oral LD50 Rat 801 mg/kg (Source: IUCLID)
  Dermal LD50 Rat 4060 mg/kg (Source: IUCLID); Dermal LD50 Rabbit 2000 mg/kg (Source: IUCLID)
  Inhalation LC50 Rat 2 g/m3 4 h (Source: IUCLID)
- 10075-85-1 No data available.

Skin corrosion/irritation: No data available.
Serious eye damage/irritation: No data available.
Respiratory sensitization: No data available.
skin sensitization: No data available.
Carcinogenicity: Not listed by IARC and NTP.
Germ Cell Mutagenicity: No data available.
Reproductive Toxicity: No data available.
STOT-Single Exposure: No data available.
STOT-Repeated Exposure: No data available.
Aspiration Hazard: No data available.

12. Ecological information

(a) Ecotoxicity

131-11-3 Freshwater Fish: 96 Hr LC50 Pimephales promelas: 39 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 49.5 mg/L; 96 Hr LC50 Lepomis macrochirus: 37 - 69 mg/L [static]; 96 Hr LC50 Pimephales promelas: 121 mg/L [static]; 96 Hr LC50 Leuciscus idus: 100 - 220 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 56 mg/L [flow-through]
Water Flea: 48 Hr EC50 Daphnia magna: 33 mg/L
Freshwater Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 20.6 - 45.8 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata:
Fluorescent material

28.4 - 71 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 142 mg/L [static]; 96 Hr EC50 Skeletonema costatum: 26.1 mg/L; 72 Hr EC50 Desmodesmus subspicatus: 204 mg/L

136-60-7 No data available.
75203-51-9 No data available.
7722-84-1 Freshwater Fish: 96 Hr LC50 Pimephales promelas: 16.4 mg/L; 96 Hr LC50 Lepomis macrochirus: 18 - 56 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 10.0 - 32.0 mg/L [static] Water Flea: 24 Hr EC50 Daphnia magna: 7.7 mg/L; 48 Hr EC50 Daphnia magna: 18 - 32 mg/L [Static] Freshwater Algae: 72 Hr EC50 Chlorella vulgaris: 2.5 mg/L

10075-85-1 No data available.

(b) Persistence and Degradability
Based on best current information, there is no data known associated with this product.

(c) Bioaccumulative potential
Based on best current information, there is no data known associated with this product.

(d) Mobility in soil
Based on best current information, there is no data known associated with this product.

(e) Other adverse effects
No information available.

13. Disposal considerations

(a) Safe handling and methods of disposal
Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U102. Dispose in accordance with all applicable regulations.

14. Transport information

(a) UN number
Not regulated as dangerous goods.

(b) UN Proper shipping name
Not regulated as dangerous goods.

(c) Transport hazard class(es)
Not regulated as dangerous goods.

(d) Packing group (if applicable)
Not regulated as dangerous goods.

(e) Marine pollutant (Yes/No)
No

(f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)
No information available.

(g) Special precautions
No information available.
15. Regulatory information

(a) Safety, health and environmental regulations specific for the product in question

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>USA</th>
<th>EU</th>
<th>Korea</th>
<th>China</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TSCA</td>
<td>EINECS</td>
<td>ECL</td>
<td>IECSC</td>
<td>DSL</td>
</tr>
<tr>
<td>131-11-3</td>
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<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
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<tr>
<td>136-60-7</td>
<td>Listed</td>
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<td>Listed</td>
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<tr>
<td>75203-51-9</td>
<td>Not listed</td>
<td>Listed</td>
<td>Listed</td>
<td>Not listed</td>
<td>Not listed</td>
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<tr>
<td>7722-84-1</td>
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<td>Listed</td>
<td>Listed</td>
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<td>7732-18-5</td>
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<tr>
<td>10075-85-1</td>
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<td>Listed</td>
<td>Listed</td>
<td>Not listed</td>
<td>NDSL</td>
</tr>
</tbody>
</table>

Remark: The above-mentioned search results are based on the Non-Confidential Inventory.

16. Other information, including date of preparation or last revision

(a) Preparation and revision information

Date of previous revision: Not applicable. Date of this revision: 23/12/2013
Revision summary: The first New SDS

(b) Abbreviations and acronyms

NIOSH The National Institute for Occupational Safety and Health
OSHA The United States Occupational Safety and Health Administration
TWA time-weighted average
STEL Short term exposure limit
TSCA Toxic Substances Control Act, The American chemical inventory
DSL Domestic Substances List
EINECS European Inventory of Existing Commercial chemical Substances
ECL Existing Chemicals List, the Korean chemical inventory
IECSC Inventory of existing chemical substances in China
IARC International agency for research on cancer
NTP National Toxicology Program

(c) Disclaimer

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.

----------------------------------------------- End of the SDS -----------------------------------------------
Notice to reader
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Jiangsu TÜV Product Service Ltd. Guangzhou Branch
TÜV SÜD Group

Engineer: Echo He
Technical Report checked: Kevin Zhang
SANFACON INDUSTRIES
MATERIAL SAFETY DATA SHEET
January, 2008

TOWELETTE, PRE-MOISTENED, LEMON-SCENTED

Section I: Identification

Identity (As used on Label and List):
MOIST TOWELETTE WITH LEMON FRAGRANCE

Ingredients: 98.8% water
1% lemon fragrance
0.01% BZK (Benzalkonium)
0.01% soap

Physical Description: A pre-moistened towelette made with virgin paper, individually packaged in a moisture-proof pouch.

Manufacturer's Name:
SANFACON INDUSTRIES INC.

Address:
1980 5th street
St-Romuald, Québec, Canada
G6W 5M6

Section II: Hazardous Ingredients

Hazardous components: N/A

Section III: Physical/Chemical Characteristics

Boiling Point: N/A  Specific Gravity: +/- 1.0
Vapour Pressure: N/A  Melting Point: N/A
Vapour Density: N/A  Evaporation Rate: N/A

Solubility in Water: Complete
Appearance and Colour: Clear liquid with lemon scent
**Section IV: Fire and Explosion Hazard Data**

Flash Point: N/A  
Flammable Limits: N/A  
Extinguishing Media: N/A  

Special Fire Fighting Procedures: NONE  
Unusual Fire & Explosion Hazards: NONE  

**Section V: Health Hazard Data**

Routes of Entry: Inhalation: N/A  
Skin: Topically applied  
Ingestion: N/A  

Health Hazards: N/A  
Carcinogenicity: N/A  

Information/Emergency: Monday through Friday, 8 a.m. to 5 p.m., (800) 463-5591 or contact the local Poison Control Centre.  

Caution: If accidentally splashed in eyes, rinse thoroughly with cold water; may cause discomfort. No need for first aid if swallowed or inhaled.  

Signs and Symptoms of Exposure:  
**SAFE AS A TOPICAL SKIN CLEANSER**

Disclaimer:  
Sanfacon acknowledges that the information contained herein is assumed accurate and complete, and illustrates the product to the best of their knowledge. No warranty, expressed or implied, is made and Sanfacon assumes no legal responsibility or liability resulting from its use.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
- Product form: Mixture
- Trade name: Medicaine® Sting and Bite Relief

1.2. Relevant identified uses of the substance or mixture and uses advised against
- Use of the substance/mixture: OTC drug used as a topical analgesic
- Use of the substance/mixture: For professional use only

1.3. Details of the supplier of the safety data sheet
James Alexander Corporation
845 Route 94 Blairstown
NJ 07825
Tel: (908) 362-9266
Note: The CHEMTREC emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to JAC at (908) 362-9266.

1.4. Emergency telephone number
- Emergency number: Chemtrec (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
- GHS-US classification:
  - Flam. Liq. 2: H225
  - Eye Irrit. 2A: H319
  - STOT SE 3: H335
  - STOT SE 3: H336

2.2. Label elements
- GHS-US labelling:
  - Hazard pictograms (GHS-US): GHS02, GHS07
  - Signal word (GHS-US): Danger
  - Hazard statements (GHS-US): H225 - Highly flammable liquid and vapour
  - H319 - Causes serious eye irritation
  - H335 - May cause respiratory irritation
  - H336 - May cause drowsiness or dizziness
  - Precautionary statements (GHS-US): P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
  - P233 - Keep container tightly closed
  - P240 - Ground/bond container and receiving equipment
  - P241 - Use explosion-proof electrical, lighting, ventilating equipment
  - P242 - Use only non-sparking tools
  - P243 - Take precautionary measures against static discharge
  - P261 - Avoid breathing dust, fume, mist, spray, vapours
  - P264 - Wash hands thoroughly after handling
  - P271 - Use only outdoors or in a well-ventilated area
  - P280 - Wear eye protection, protective clothing, protective gloves
  - P303+P361+P330 - 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 EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
  - P312 - Call a POISON CENTER/doctor/physician if you feel unwell
  - P337+P313 - If eye irritation persists: get medical advice/attention
SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

Full text of H-phrases: see section 16

### 3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene glycol</td>
<td>(CAS No) 25322-68-3</td>
<td>50-55</td>
<td>STOT SE 3, H335</td>
</tr>
<tr>
<td>L-Menthol</td>
<td>(CAS No) 2216-51-5</td>
<td>1</td>
<td>Skin Irrit. 2, H315, Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

### 4.1. Description of first aid measures

**First-aid measures general:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid measures after inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing stops, give artificial respiration. In case of breathing difficulties administer oxygen by trained personnel. Seek medical attention immediately.

**First-aid measures after skin contact:** Immediately flush skin with plenty of water for at least 15 minutes. Remove/Take off immediately all contaminated clothing. Do not rub the skin and eyes after direct contact with the product. Seek medical attention immediately. Wash contaminated clothing before reuse.

**First-aid measures after eye contact:** In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately get medical attention.

**First-aid measures after ingestion:** Contact a Poison Control Center immediately. Give no more than 2 glasses of water and induce vomiting by giving 30 cc (2 tablespoons) of syrup of ipecac. If victim is a child, give no more than 1 glass of water and 15cc (1 tablespoon) syrup of ipecac. If syrup of ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of victim's throat. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention. Immediately call a POISON CENTER or doctor/physician.

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

**Symptoms/injuries after inhalation:** May cause respiratory irritation. May cause drowsiness or dizziness. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

**Symptoms/injuries after skin contact:** Repeated or prolonged skin contact may cause irritation.

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

**Symptoms/injuries after ingestion:** Irritating to the gastrointestinal tract. May cause abdominal pain and vomiting (sometimes bloody). Ingestion may cause central nervous system depression, low blood pressure, rapid heart beat and liver damage. Early to moderate central nervous system depression may be evidenced by giddiness, headache, dizziness and nausea. In extreme cases, unconsciousness, respiratory depression and death may occur. Liver damage may be evidenced by loss of appetite, jaundice (yellowish skin color) and sometimes pain in the upper abdomen on the right side.

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

Individuals with pre-existing skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects of overexposure.
SECTION 5: Firefighting measures

5.1. Extinguishing media

| Unsuitable extinguishing media | Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

| Fire hazard | Highly flammable liquid and vapour. |
| Explosion hazard | May form flammable/explosive vapour-air mixture. |
| Reactivity | Thermal decomposition generates: Corrosive vapours. Reacts violently with acids. An exothermic reaction may occur. |

5.3. Advice for firefighters

| Firefighting instructions | Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. |
| Protective equipment for firefighters | Containers may swell and Burst during a fire due to internal pressure caused by heat. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours. Alcohols burn with a pale blue flame which may be extremely hard to see under normal lighting conditions. Personnel may be able to feel the heat of the fire without seeing flames. Extreme caution must be exercised in fighting alcohol fires. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| General measures | Eliminate all ignition sources if safe to do so. Use special care to avoid static electric charges. No naked lights. No smoking. Stop leak if safe to do so. No action shall be taken involving any personal risk or without suitable training. Wear protective clothing. For further information refer to section 8: Exposure-controls/personal protection. |
| Emergency procedures | Evacuate unnecessary personnel. |

6.1.1. For non-emergency personnel

| Emergency procedures | Evacuate unnecessary personnel. |

6.1.2. For emergency responders

| Protective equipment | Equip cleanup crew with proper protection. |
| Emergency procedures | Ventilate area. |

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

| Methods for cleaning up | Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Consult the appropriate authorities about waste disposal. Ensure all national/local regulations are observed. |

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| Additional hazards when processed | Handle empty containers with care because residual vapours are flammable. |
| Precautions for safe handling | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Use personal protective equipment as required. Provide good ventilation in process area to prevent formation of vapour. Do not breathe gas, fumes, vapour or spray. No naked lights. No smoking. Use only non-sparking tools. Never use pressure to empty container. Ground/bond container and receiving equipment. Take care to allow internal pressure to escape from container before releasing closures. Remove closure carefully; internal pressure may be present. Keep closure up to prevent leakage. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| Hygiene measures | Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. |
7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Ensure the ventilation system is regularly maintained and tested. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. A washing facility/water for eye and skin cleaning purposes should be present. Comply with applicable regulations.

Storage conditions: Keep only in the original container in a cool well ventilated place. Keep in fireproof place. Keep container tightly closed. Protect containers against physical damage. Detached outside storage is preferable. Inside storage should be in an NFPA approved flammable liquids storage room or cabinet. Store in corrosion-proof area at temperatures below 77 °F (25 °C). Store away from direct sunlight or other heat sources.

Incompatible materials: Avoid mixing with acids, most common metals, strong oxidizing agents, brass, zinc, chlorine, aluminum, copper, bronze, mercury, dimethyl sulfate and acetyl chloride.

Storage temperature: < 25 °C Store at temperatures below 77 °F (25 °C)

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Isopropyl alcohol (67-63-0)</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (ppm)</th>
<th>200 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>400 ppm</td>
<td></td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>980 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>400 ppm</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. Use explosion-proof ventilating equipment.

Personal protective equipment: Avoid all unnecessary exposure. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. For certain operations, additional Personal Protection Equipment (PPE) may be required. Protective goggles. Gloves. Protective clothing.

Hand protection: Wear protective gloves, rubber gloves. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection: Chemical goggles or face shield.

Skin and body protection: Wear suitable protective clothing. Chemical resistant safety shoes.

Respiratory protection: Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE). Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals. Care must be taken to assure that any respirator chosen is capable of protecting the user from both ammonia and ethyl alcohol vapors.

Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Clear.
Colour: Green.
Odour: Odor of isopropyl alcohol, residual odor of menthol.
Medicaine® Sting and Bite Relief
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour threshold</td>
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<tr>
<td>pH</td>
<td>8.5</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
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</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 35 °C (&gt;95 °F )</td>
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<tr>
<td>Flash point</td>
<td>16.6 °C (62 °F )</td>
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<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
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</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.029 (Specific Gravity @ 25 °C )</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Log Pow</td>
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</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
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</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Thermal decomposition generates: Corrosive vapours. Reacts violently with acids. An exothermic reaction may occur.

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials
Avoid mixing with acids, most common metals, strong oxidizing agents, brass, zinc, chlorine, aluminum, copper, bronze, mercury, dimethyl sulfate and acetyl chloride.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified
(Based on available data, the classification criteria are not met)

<table>
<thead>
<tr>
<th>Isopropyl alcohol (67-63-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
</tr>
<tr>
<td>ATE CLP (dermal)</td>
</tr>
</tbody>
</table>
Medicaine® Sting and Bite Relief
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

<table>
<thead>
<tr>
<th>L-Menthol (2216-51-5)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>3300 mg/kg</td>
<td>ATE CLP (oral)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyethylene glycol (25322-68-3)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 20 ml/kg</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified

(Based on available data, the classification criteria are not met)

pH: 8.5

Serious eye damage/irritation : Causes serious eye irritation.

pH: 8.5

Respiratory or skin sensitisation : Not classified

(Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified

(Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified

(Based on available data, the classification criteria are not met)

<table>
<thead>
<tr>
<th>Isopropyl alcohol (67-63-0)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3 - Not classifiable</td>
<td></td>
</tr>
</tbody>
</table>

Reproductive toxicity : Not classified

(Based on available data, the classification criteria are not met)

Specific target organ toxicity (single exposure) : May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : Not classified

(Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified

(Based on available data, the classification criteria are not met)

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

Symptoms/injuries after skin contact : Repeated or prolonged skin contact may cause irritation.

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

Symptoms/injuries after ingestion : Irritating to the gastrointestinal tract. May cause abdominal pain and vomiting (sometimes bloody). Ingestion may cause central nervous system depression, low blood pressure, rapid heart beat and liver damage. Early to moderate central nervous system depression may be evidenced by giddiness, headache, dizziness and nausea. In extreme cases, unconsciousness, respiratory depression and death may occur. Liver damage may be evidenced by loss of appetite, jaundice (yellowish skin color) and sometimes pain in the upper abdomen on the right side.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Isopropyl alcohol (67-63-0)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
<td></td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L-Menthol (2216-51-5)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>18.9 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Medicaine® Sting and Bite Relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
</tr>
</tbody>
</table>
12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Medicaine® Sting and Bite Relief</th>
<th>Bioaccumulative potential</th>
<th>Not established.</th>
</tr>
</thead>
</table>

| Isopropyl alcohol (67-63-0)     | Log Pow                   | 0.05 (at 25 ℃)    |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Do not re-use empty containers. Ensure all national/local regulations are observed. Consult the appropriate authorities about waste disposal.

Additional information: Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description: UN1993 Flammable liquids, n.o.s. (contains isopropanol), 3, II

UN-No.(DOT): 1993

DOT NA no.: UN1993

DOT Proper Shipping Name: Flammable liquids, n.o.s. (contains isopropanol)

Department of Transportation (DOT) Hazard Classes: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT): 3 - Flammable liquid

DOT Symbols: G - Identifies PSN requiring a technical name

Packing group (DOT): II - Medium Danger

DOT Special Provisions (49 CFR 172.102): IB2 - Authorized IBs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized.

T7 - 4 178.274(d)(2) Normal............. 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 °C (32 °F).

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx): 150

DOT Packaging Non Bulk (49 CFR 173.xxx): 202

DOT Packaging Bulk (49 CFR 173.xxx): 242

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 60 L

06/06/2014 EN (English)
DOT Vessel Stowage Location: B - (i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

**Additional information**

**Other information**: No supplementary information available.

**ADR**

**Transport document description**: No additional information available.

**Transport by sea**

No additional information available.

**Air transport**

No additional information available.

**SECTION 15: Regulatory information**

**15.1. US Federal regulations**

**Isopropyl alcohol (67-63-0)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory
- Listed on SARA Section 313 (Specific toxic chemical listings)

**EPA TSCA Regulatory Flag**

- T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

**SARA Section 313 - Emission Reporting**

- 1.0 % (only if manufactured by the strong acid process, no supplier notification)

**L-Menthol (2216-51-5)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory

**Polyethylene glycol (25322-68-3)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory

**15.2. International regulations**

**CANADA**

**Isopropyl alcohol (67-63-0)**

- Listed on the Canadian DSL (Domestic Sustances List) inventory.

**WHMIS Classification**

- Class B Division 2 - Flammable Liquid
- Class D Division 2 Subdivision B - Toxic material causing other toxic effects

**L-Menthol (2216-51-5)**

- Listed on the Canadian DSL (Domestic Sustances List) inventory.

**Polyethylene glycol (25322-68-3)**

- Listed on the Canadian DSL (Domestic Sustances List) inventory.

**EU-Regulations**

**Isopropyl alcohol (67-63-0)**

- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

**L-Menthol (2216-51-5)**

- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

**Polyethylene glycol (25322-68-3)**

- Listed on the EU - No-Longer Polymers List (67/548/EEC)

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

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

Not classified
15.2.2. National regulations

<table>
<thead>
<tr>
<th>Isopropyl alcohol (67-63-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (the Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on Inventory of Existing Chemical Substances (IECSC)</td>
</tr>
<tr>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemicals Substances) inventory.</td>
</tr>
<tr>
<td>Listed on Industry Safety and Health Law Substances (ISHL)</td>
</tr>
<tr>
<td>Listed on the Korean ECL (Existing Chemical List) inventory.</td>
</tr>
<tr>
<td>Listed on New Zealand - Inventory of Chemicals (NZIoC)</td>
</tr>
<tr>
<td>Listed on Inventory of Chemicals and Chemical Substances (PICCS)</td>
</tr>
<tr>
<td>Listed on the Canadian Ingredient Disclosure List</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L-Menthol (2216-51-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (the Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on Inventory of Existing Chemical Substances (IECSC)</td>
</tr>
<tr>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemicals Substances) inventory.</td>
</tr>
<tr>
<td>Listed on Industry Safety and Health Law Substances (ISHL)</td>
</tr>
<tr>
<td>Listed on New Zealand - Inventory of Chemicals (NZIoC)</td>
</tr>
<tr>
<td>Listed on Inventory of Chemicals and Chemical Substances (PICCS)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyethylene glycol (25322-68-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (the Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on Inventory of Existing Chemical Substances (IECSC)</td>
</tr>
<tr>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemicals Substances) inventory.</td>
</tr>
<tr>
<td>Listed on the Korean ECL (Existing Chemical List) inventory.</td>
</tr>
<tr>
<td>Listed on New Zealand - Inventory of Chemicals (NZIoC)</td>
</tr>
<tr>
<td>Listed on Inventory of Chemicals and Chemical Substances (PICCS)</td>
</tr>
</tbody>
</table>

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H225</th>
<th>Highly flammable liquid and vapour</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
</tbody>
</table>

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
Medicaine® Sting and Bite Relief
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

This Material Safety Data Sheet is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, the safe handling of chemical materials. James Alexander Corporation (JAC), expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose with respect to the product or information provided herein. All information appearing herein is based upon data obtained from the manufacturer(s) and/or recognized technical sources. While the information is believed to be accurate, JAC makes no representations as to its accuracy or sufficiency. Conditions of use are beyond JAC’s control and therefore, users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein and does not relate to its use in combination with any other material or in any other process.
SAFETY DATA SHEET

1. Product and Company Identification

Red Emergency Flare - No Perchlorate (NPC)

Formulation

Identification:
The NPC flare will have the following symbol on it:

![Symbol Image]

Synonyms: Emergency Road Flare
Railway Flare

Identification:
The NPC flare will have the following symbol on it:

Identified Use: Emergency signal

Use Advised Against: Do not use indoors or inside a vehicle

Manufacturers Information
Orion Safety Products
28320 St. Michaels Rd
Easton, MD 21601
800-637-7807
410-822-0318

EMERGENCY CHEMTREC
1-800-424-9300

2. Hazards Identification

GHS Classifications
Skin Irritation Category 2 H315
Eye Irritation Category 2A H319
STOT - Single Exposure Category 3 H335

GHS Label Elements
Pictograms

Signal Word Warning

Precautionary Statements
P103 Keep out of reach of children
P261 Avoid breathing dust/smoke.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective eye protection
P370 In case of fire: use water deluge
P501 Dispose of contents/container in accordance with local and national regulations.

Hazard Statements
H315 /319 Causes skin and serious eye irritation
H335 May cause respiratory irritation

P301/315 IF SWALLOWED: Get immediate medical advice/attention.
P302/352 IF ON SKIN: Wash with plenty of soap and water.
P304/340/342 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P305/338/351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P305/338/351 IF SKIN irritation or rash occurs, get medical advice/attention.
P333/313 IF SKIN irritation or rash occurs, get medical advice/attention.
P333/313

Hazards Not Otherwise Classified (HNOC): produces hot flame

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;75%</td>
</tr>
<tr>
<td>Sulfur</td>
<td>7704-34-9</td>
<td>231-722-6</td>
<td>&lt;25%</td>
</tr>
<tr>
<td>Potassium Nitrate</td>
<td>7767-79-1</td>
<td>231-818-8</td>
<td>&lt;25%</td>
</tr>
<tr>
<td>Paraffinic Oil</td>
<td>64742-54-7</td>
<td>232-384-2</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Potassium Chlorate</td>
<td>3811-04-9</td>
<td>231-100-4</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Waxy sawdust</td>
<td>mixture</td>
<td>none</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Polyvinyl Chloride</td>
<td>9002-86-2</td>
<td>200-831-0</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Shellac</td>
<td>mixture</td>
<td>none</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Charcoal</td>
<td>1333-86-4</td>
<td>231-153-3</td>
<td>&lt;1%</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 area with soap and water for 15 minutes. Remove contaminated clothing and wash before reuse. Get medical aid immediately if burned or irritation occurs.

Eyes
If contents get into eye, flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses if easily possible. Do not use boric acid to rinse with; sulfur is an acid irritant. Get medical aid immediately.

Ingestion
Get medical aid immediately.
5. Firefighting Measures

Extinguishing Media
- Water deluge
- Foam and dry chemical extinguishers
- Unsuitable Extinguishing Media
- Carbon dioxide extinguishers

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
- Use copious amounts of water to extinguish fire comprised of flares. Flares contain oxidizers and will continue to burn unless a significant amount of water is used. Do not breathe smoke.

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. Wear flame retardant clothing with long sleeves, dust mask, rubber or nitrile gloves, safety goggles, safety shoes. Avoid friction on the released product. Keep away from ignition sources.

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.

7. Handling and Storage

Precautions for Safe Handling
- Hold and point flare away from body when igniting. Exercise caution when using this product since molten flecks may be emitted. Produces hot flame. Burning flare can cause severe burns if in contact with body. Avoid contact with clothing and other combustible materials. Wear eye protection during use. Follow instructions on package. Use outdoors only! Do not ignite or burn product inside a vehicle or building. Avoid inhalation of smoke. Do not dismantle. Do not allow contents to touch eyes, skin or clothing. Do not ingest contents as they may be harmful if swallowed. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with heat, sparks, and flame.

Conditions for Safe Storage, Including Any Incompatibilities
- Store away from direct sunlight, heat and incompatible materials. See section 10. Store away from food and beverages. Store away from flammable materials, sources of heat, flame and sparks. Store at ambient temperature. Do not store partially burned flares in a vehicle, warehouse, or any other building. Plastic bags are provided for moisture protection. Keep partially used bags sealed at all times.

8. Exposure Controls / Personal Protection

Control parameters

<table>
<thead>
<tr>
<th>Exposure Controls</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>Sulfur</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Potassium Nitrate</td>
<td>Nuisance dust 15 mg/m³</td>
<td>Nuisance dust 15 mg/m³</td>
</tr>
<tr>
<td>Paraffinic Oil</td>
<td>5 mg/m³</td>
<td>TWA 5 mg/m³</td>
</tr>
<tr>
<td>Potassium Chlorate</td>
<td>No Airborne Exposure Limits established</td>
<td>No Airborne Exposure Limits established</td>
</tr>
<tr>
<td>Waxy sawdust</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Polyvinyl Chloride</td>
<td>No known hazardous components above regulatory thresholds in this product.</td>
<td>No known hazardous components above regulatory thresholds in this product.</td>
</tr>
<tr>
<td>Shellac</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Charcoal</td>
<td>Nuisance dust 15 mg/m³</td>
<td>Nuisance dust 15 mg/m³</td>
</tr>
</tbody>
</table>

Exposure controls

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

Personal Protective Equipment

Eye / Face Protection
- Safety glasses or goggles

Skin Protection
- None under normal conditions when using product unless prolonged handling is anticipated. Impervious protective clothing, including gloves, boots, and a lab coat, apron or coveralls, as appropriate, when cleaning up spilled product. Wash hands and face before eating, drinking or using tobacco products.

Respiratory Protection
- None under normal conditions when using product. A particulate respirator (NIOSH T1 N95 or better filters) may be worn during the cleanup of spilled materials.

General Hygiene
- Use product outdoors away from combustible products. For cleanup of spilled materials, emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous materials.
9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (color, physical form, shape)</td>
<td>Yellow to grey powder</td>
</tr>
<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>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto Ignition Temperature</td>
<td>360°F</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>Decomposition Temperature</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 applicable</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Stability and Reactivity</th>
<th>Possibility of Hazardous Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td>Hazardous polymerization will not occur</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No information available</td>
</tr>
</tbody>
</table>

11. Toxicology Information

### Ingredient acute toxicity information

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50</th>
<th>skin LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strontium Nitrate</td>
<td>Rat: &gt;2750 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Sulfur</td>
<td>Rat: &gt;2000 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Potassium Nitrate</td>
<td>Rat: &gt;3750 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Paraffinic Oil</td>
<td>Rat: &gt;2000 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>Rat: &gt;1870 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Waxy sawdust</td>
<td>Rat: &gt;5000 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Polyvinyl Chloride</td>
<td>Rat: &gt;5000 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Shellac</td>
<td>Rat: 10000 mg/kg</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Charcoal</td>
<td>Rat: 15400 mg/kg</td>
<td>Rabbit: 3 g/kg</td>
<td>No information</td>
</tr>
</tbody>
</table>

### Product toxicological information

#### Acute Toxicity
- Not classified – Acute Toxicity Estimate yields oral LD50 over 5000 mg/kg bw
- Category 2 – over 10% of ingredients classified as a Category 2

#### Skin Irritation / Corrosion
- Category 2a – over 10% of ingredients classified as a Category 2a

#### Serious Eye Damage / Irritation
- Not classified (Based on available data, the classification criteria are not met)

#### Respiratory / Skin Sensitization
- Not classified (Based on available data, the classification criteria are not met)

#### Germ Cell Mutagen
- Not classified (Based on available data, the classification criteria are not met)

#### Reproductive Toxicity
- Not classified (Based on available data, the classification criteria are not met)

#### STOT – single exposure
- Category 3 – respiratory over 10% of ingredients classified as a Category 3 respiratory STOT hazard

#### STOT – repeated exposure
- Not classified (Based on available data, the classification criteria are not met)

#### Aspiration Hazard
- Not classified (Based on available data, the classification criteria are not met)

### Likely routes of exposure
- Skin, ingestion, inhalation

### Symptoms related to the physical, chemical and toxicological characteristics
- Contents irritating to eyes due to chemical and physical properties of the mixture. Ingestion of contents may cause gastrointestinal irritation with nausea, vomiting and diarrhea. Individuals with known allergies to sulfide drugs may also have allergic reactions to elemental sulfur.
- Inhalation of contents or smoke from burning flare will cause irritation to the lungs and mucus membrane. Prolonged or repeated skin contact with contents may cause dermatitis.

### 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
- Strontium Nitrate: Acute toxicity - Fishes, Carassius auratus, LC100, 9,615 mg/l; Chronic toxicity - Fishes, Gasterosteus aculeatus, LC100, 2,912 mg/l
- Sulfur: Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 180 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) – > 5,000 mg/l - 48 h
- Potassium Chloride: fish; LC50 oncorhynchus mykiss (rainbow trout) 1750 mg/l – 96 hr, EC50 daphnia magna (water flea) 1093 mg/l 24 hr
- Paraffinic Oil: Oil Mist, Marine Lepomis macrochirus (LC50) 96 hour(s) >100 mg/l Onchorhynchus mykiss (LC50) 96 hour(s) >100 mg/l
- Potassium Nitrate: fish: Guppy (Poecilia Reticulata) LC50 180 mg/L (96 h); zooplankton: Daphnia magna LC50 490mg/l – 48hr

#### Persistence / Degradability
- Potassium Nitrate: Soluble in water Persistence is unlikely based on information available.

#### Bioaccumulation / Accumulation
- No information found

#### Mobility in Environmental Media
- Strontium Nitrate: Water:: considerable solubility and mobility; Soil/sediments non-significant adsorption
- Potassium Nitrate: Will likely be mobile in the environment due to its water solubility.

### Other adverse effects
- No information found
13. **Disposal Considerations**

**Disposal methods**
Flares should be allowed to burn to completion. Partially burned or unburned flares, spilled contents, and ash from burned flares should be disposed of in accordance with federal, state, and local requirements. Consult factory for any additional disposal concerns.

14. **Transportation Information**

<table>
<thead>
<tr>
<th>Description</th>
<th>ID Number</th>
<th>shipping name</th>
<th>hazard class</th>
<th>packing group</th>
<th>EX Number</th>
<th>Reportable Quantities</th>
<th>Shipping method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Shipment</td>
<td></td>
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<tr>
<td>No inner packaging</td>
<td>NA1325</td>
<td>Fusee</td>
<td>4.1</td>
<td>II</td>
<td>EX1992090001</td>
<td>none</td>
<td>Ground only</td>
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<tr>
<td>Retail Packaging</td>
<td>UN3178</td>
<td>Flammable solid, inorganic</td>
<td>4.1</td>
<td>II</td>
<td>EX2002110114</td>
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<td>Ground only</td>
</tr>
<tr>
<td>(highway flares or fusees)</td>
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</table>

**International / Air**

| Inner Packaging (bag) | UN0373 | Signal devices, hand | 1.4S          | EX1992090001 | none | Air / ground |

* As noted on EX1992090001

** According to 49CFR, Exception for Class 4, flares properly packaged and classed as UN3178, Flammable solid, inorganic (highway flares or fusees), may be renamed “Consumer Commodity” and reclassed as ORM-D and offered for transportation and transported in accordance with the applicable provisions of that subchapter.

Marine Pollutant: **no**

**Special precautions for user:** No information available

15. **Regulatory Information**

<table>
<thead>
<tr>
<th>US Regulations</th>
<th>TSCA</th>
<th>CERCLA</th>
<th>CWA</th>
<th>CAA</th>
<th>SARA</th>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Pressure</th>
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<tbody>
<tr>
<td>Strontium Nitrate</td>
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<td>no</td>
<td>no</td>
<td>no</td>
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<td>no</td>
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<td>no</td>
<td>no</td>
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<tr>
<td>Sulfur</td>
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<td>no</td>
<td>no</td>
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<tr>
<td>Potassium Nitrate</td>
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<td>no</td>
<td>yes</td>
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<td>Paraffinic Oil</td>
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<td>Potassium Chlorate</td>
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<td>no</td>
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<td>no</td>
<td>no</td>
<td>no</td>
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<td>Waxy sawdust</td>
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<td>no</td>
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<tr>
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<td>Shellac Mixture</td>
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<td>no</td>
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<td>Charcoal</td>
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**US States**

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<thead>
<tr>
<th>Prop 65</th>
<th>NJ</th>
<th>PA</th>
<th>Canada</th>
<th>WHMIS</th>
<th>DSL</th>
<th>Europe</th>
<th>Wgk</th>
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<tbody>
<tr>
<td>Strontium Nitrate</td>
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<td>1743</td>
<td>no</td>
<td>C Oxidizing materials D1B Toxic materials D2B</td>
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<tr>
<td>Sulfur</td>
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<td>1757</td>
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<td>D4 Flammable solid D2B Toxic materials</td>
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<td>Potassium Chlorate</td>
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<td>C Oxidizing materials D1B Toxic materials</td>
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<td>Waxy sawdust</td>
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<td>No</td>
<td>no</td>
<td>No results</td>
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<td>Polyvinyl Chloride</td>
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<td>Shellac Mixture</td>
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<td>no</td>
<td>No results</td>
<td>unknown</td>
<td>not listed</td>
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<tr>
<td>Charcoal</td>
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<td>Yes</td>
<td>yes</td>
<td>D2A Very toxic materials D2B Toxic materials</td>
<td>yes</td>
<td>Nwg</td>
<td></td>
</tr>
</tbody>
</table>

**CERCLA:** comprehensive environmental response, compensation and liability act – US
**CWA:** clean water act – US
**CAA:** clean air act – US
**SARA:** superfund amendments and reauthorization act – US
**PROP 65:**California’s Proposition 65 list

16. **Other Information**

**Revision Information:** May 2015

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>HMIS Rating</th>
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<tbody>
<tr>
<td>Flammability</td>
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<tr>
<td>Health</td>
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<tr>
<td>Reactivity</td>
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</table>

**Key / Legend:**

- HMIS: hazardous material identification system
- NFPA: national fire protection association
- CAS: Chemical Abstracts Service number
- CERCLA: comprehensive environmental response, compensation and liability act – US
- CWA: clean water act – US
- CAA: clean air act – US
- SARA: superfund amendments and reauthorization act – US
- PROP 65: California's Proposition 65 list
- WHMIS: workplace hazardous materials information system – Canada
- DSL: Domestic Substances List - Canada
- WGK: water hazard classes - Germany

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