



SAFETY DATA SHEET

Effective Date: JULY 2019

ITEM: Coastal Alert / Locate Signaling Kit with 1st Aid

PART # 549

UPC 077403105496

Contents

SDS for each of the following

12 Ga HP Red Aerial Signal

Marine Hand Held Red Flare (HHRF)

Marine Hand Held Orange Smoke Signal (HHOS)

1st Aid Kit Contents

Alcohol Wipes, Antiseptic Towelettes,
1st Aid/Burn Cream, Sting Relief Pads

SHIPPING INFORMATION

UN0353, Articles, explosive, n.o.s., 1.4G (ERG 114)
(contains strontium nitrate and magnesium)

EX2004110274

SAFETY DATA SHEET

1. Product and Company Identification

12 Ga HP (High Performance) Red Aerial Signal

Identified Use: Emergency signal **Use Advised Against:** Do not use indoors or inside of a vehicle.

Manufacturer's Information: Orion Safety Products
3157 N 500 W
Peru, Indiana 46970
US 1-800-851-5260
Int'l (11) 1-765-472-4375

**EMERGENCY
RESPONSE** CHEMTREC
1-800-424-9300
1-703-527-3887

2. Hazards Identification

GHS Classifications

Explosive	Category 1.4
Skin Irritation	Category 2
Eye Irritation	Category 1
Carcinogenicity	Category 2
STOT-Single Exposure	Category 3

GHS Label Elements

Hazard Statements

H204	Fire or projection hazard
H315	Causes skin irritation
H318	Causes serious eye damage
H351	Suspected of causing cancer
H335	May cause respiratory irritation

Pictograms



Signal Word **Danger**

Precautionary Statements

P102	Keep out of reach of children.	P301/315	IF SWALLOWED: Get immediate medical advice /attention.
P103	Read carefully and follow all instructions.	P302/352	IF ON SKIN: Wash with plenty of soap and water.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking	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.
P232	Protect from moisture		
P261	Avoid breathing dust/fumes.	P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P264	Wash hands thoroughly after handling.		
P270	Do not eat, drink or smoke when using this product.	P333/313	If skin irritation or rash occurs, get medical advice/attention.
P271	Use only outdoors.	P370	In case of fire: use water deluge
P280	Wear protective eye protection.		

Hazards Not Otherwise Classified (HNOC): none

3. Composition / Information on Ingredients

Component	CAS #	EINCS #	Percentage
High Density Polyethylene	9002-88-4	Polymer	<60%
Talc	14807-96-6	238-877-9	<20%
Strontium Nitrate	10042-76-9	233-131-9	<20%
Magnesium	7439-95-4	231-104-6	<20%
Strontium Peroxide	1314-18-7	215-224-6	<10%
Aluminum	7429-90-5	231-072-3	<5%
Polyvinyl Chloride	9002-86-2	None	<5%
Dextrin	9004-53-9	232-675-4	<1%
Potassium Nitrate	7757-79-1	231-818-8	<4%
Charcoal	16291-96-6	240-383-3	<1%
Sulfur	7704-34-9	231-722-6	<2%
Iron	1309-37-1	231-096-4	<5%
Copper	7440-50-8	231-159-6	<3%

Note: Due to Confidential Business Information, "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 if irritation occurs.
Eyes	If contents get into eyes, flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses if easily possible. Get medical aid immediately.
Ingestion	Get medical aid immediately.

Most important symptoms and effects both acute and delayed

See section 2 labeling and section 11

Indication of any immediate medical attention and special treatment needed

No data available

5. Firefighting Measures

Extinguishing Media	Water deluge	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 quantity of water on contents / broken shells 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.		
Further Information	No data available		

6. Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures

Do not breathe smoke or contents. 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.

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 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 of 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

Precautions for Safe Handling

Use product only in designated launcher – do not attempt to use in 12 gauge shotgun. Point launcher away from body, other people, animals or combustible products when firing. Wear appropriate eye protection during use. Turn face from launcher when firing. Follow instructions on package. Avoid contact with clothing and other combustible materials. Use outdoors only! Do not ignite or launch product inside a vehicle or building. Avoid ingestion of smoke and inhalation of contents. Wash thoroughly after handling. Avoid contact with heat sparks, and flame. Do no disassemble signals.

Conditions for Safe Storage, Including Any Incompatibilities

Store in a dry place 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.

8. Exposure Controls / Personal Protection

Control Parameters

Exposure Limits	OSHA PEL	ACGIH TLV
High Density Polyethylene	5mg/ml for respirable portion and 15mg/ml' for total dust	3mg/ml for respirable portion and 10mg/ml' for total dust
Talc	2.0 mg/m ³	2.0 mg/m ³
Strontium Nitrate	Not Established	Not Established
Magnesium	Not Established	Not Established
Strontium Peroxide	Nuisance dust 15mg/m ³	Nuisance dust 15mg/m ³
Aluminum	TWA: 15 mg/m ³	TWA: 1 mg/m ³
Polyvinyl Chloride	5mg/ml for respirable portion and 15mg/ml' for total dust	5 and 10 mg/ml, respectively
Dextrin	15 mg/m ³	15 mg/m ³
Charcoal	3.5 mg/m ³	3 mg/m ³
Sulfur	20 ppm	Not Established
Potassium Nitrate	15 mg/m ³	10 mg/m ³
Iron	TWA: 10 mg/m ³	Not Established
Copper	0.1 mg/m ³ (fume) 1 mg/m ³ (dusts and mists)	0.2 mg/m ³ (fume), 1 mg/m ³ (dusts and mists)

Exposure Controls

Engineering Controls

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

Personal Protective Equipment

Eye / Face Protection

Turn face from launcher when firing. Wear safety glasses or goggles during use and when cleaning up spilled contents.

Skin Protection

None under normal conditions when using product unless prolonged handling is anticipated. When cleaning up spilled contents, wear 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 N195 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

Appearance (color, physical form, shape): Grey powder

pH: No data available

Boiling Point / Range: Not applicable

Vapor Pressure: Not applicable

Odor: No data available

Flammability: No data available

Partition Coefficient: No data available

Auto Ignition Temperature: No data available

Melting Point: No data available

Freezing Point: Not applicable

Specific Gravity: Not applicable

Odor Threshold: No data available

Flammability Limits: No data available

Viscosity: No data available

Solubility: No data available

Evaporation Rate: Not applicable

Vapor Density: Not applicable

Flash Point: No data available

Relative Density: No data available

Decomposition Temperature: No data available

10. Stability and Reactivity

Chemical Stability: Stable

Reactivity: No information available

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

Conditions to Avoid

Excessive temperatures, moisture, acids, and ignition sources

Incompatible Materials

Reducing Agents, Organic Materials, Finely Powdered Metals, Acids, Water, Halogens

Hazardous Decomposition Products

Strontium Oxides, Carbon Monoxide and Dioxide, Nitrous Oxides, Magnesium Hydroxides and Oxides.

11. Toxicology Information

Ingredient acute toxicity information

Toxicology	Oral LD50	Skin LD50	LC50
High Density Polyethylene	4000mg/kg	not available	12,000 mg/m ³ /30min
Talc	not available	not available	not available
Strontium Nitrate	Rat 2750 mg/kg	not available	not available
Magnesium	Rat 230 mg/kg	not available	not available
Strontium Peroxide	Rat 980 mg/kg	not available	not available
Aluminum	Rat: >2000 mg/kg	Rat – 4h - >888 mg/l	not available
Polyvinyl Chloride	Rat: >5000 mg/kg	not available	not available
Dextrin	None Known	Not Sensitizing	None Known
Potassium Nitrate	Rat 3015 mg/kg	not available	not available
Charcoal	Rat 10000 mg/kg	Rabbit >3000 mg/kg	not available
Sulfur	Rat 175 mg/kg	Rabbit >2000 mg/kg	Rat 9.23 mg/l/4hr
Iron	Rat: 30000 mg/kg	not available	not available
Copper	Rat: 5800 mg/kg	not available	not available

Product toxicological information

Acute Toxicity	Not classified – <i>Acute Toxicity Estimate yields oral LD₅₀ over 5000 mg/kg bw 17% unknown</i>
Skin Irritation / Corrosion	Category 2 – <i>over 0.1% of ingredients classified as a Category 2 skin irritant</i>
Serious Eye Damage / Irritation	Category 1 – <i>over .01% of ingredients classified as a Category 1 eye irritant</i>
Respiratory / Skin Sensitization	No information found
Germ Cell Mutagen	No information found
Carcinogen	Category 2 – <i>over 0.1% of ingredients classified as a Category 2 carcinogens</i>
Reproductive Toxicity	No information found
STOT – single exposure	Category 3 – <i>respiratory over 20% of ingredients classified as a Category 3 respiratory STOT hazard</i>
STOT – repeated exposure	No information found
Aspiration Hazard	No information found
Likely routes of exposure	Skin, ingestion, inhalation
Symptoms related to the physical, chemical and toxicological characteristics	Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Ingestion of contents may cause gastrointestinal irritation with nausea, vomiting and diarrhea. Inhalation will cause irritation to the lungs and mucus membrane. Absorption of strontium peroxide into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Prolonged or repeated skin contact with contents may cause dermatitis.
Delayed and immediate effects and chronic effects from short and long term exposure	
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 Magnesium: LC50 1355 mg/l fish
Persistence / Degradability	No information found
Bioaccumulation / Accumulation	No information found
Mobility in Environmental Media	Strontium Nitrate: Water:: considerable solubility and mobility; Soil/sediments non-significant adsorption
Other adverse effects	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

	ID Number	Proper Shipping Name	Hazard Class	Packing Group	EX Number	Reportable Quantities
Domestic & International	UN0403	Flares, aerial	1.4G	n/a	EX2004110275	none
Marine pollutant: no			Special precautions for user: no information available			

15. Regulatory Information

US Regulations	TSCA	CERCLA	CWA	CAA	SARA 313	SARA 302	Acute	Chronic	Fire	Reactivity	Pressure
HD Polyethylene	yes	no	no	no	no	no	no	no	no	no	no
Talc	yes	no	no	no	no	no	no	no	no	no	no
Strontium Nitrate	yes	no	no	no	yes	no	yes	no	no	yes	no
Magnesium	yes	no	no	no	no	no	no	no	yes	yes	no
Strontium Peroxide	yes	no	no	no	no	no	yes	no	yes	yes	no
Aluminum	yes	no	no	no	yes	no	no	no	no	no	no
Polyvinyl Chloride	yes	no	no	no	no	no	yes	no	no	no	no
Dextrin	yes	no	no	no	no	no	no	no	no	no	no
Potassium Nitrate	Yes	no	no	no	yes	no	no	no	yes	no	no
Charcoal	yes	no	no	no	no	no	yes	yes	yes	no	no
Sulfur	yes	no	no	no	no	no	yes	yes	yes	no	no
Iron	yes	no	no	no	no	no	no	no	yes	no	no
Copper	yes	yes	yes	no	yes	no	yes	no	yes	no	no

US States	Prop 65	NJ	PA	Canada	WHMIS	DSL	Europe	wgk
HD Polyethylene	no	yes	yes		Not Controlled	yes		not listed
Talc	yes	yes	yes	yes	Class D2A – Very toxic material	yes		not listed
Strontium Nitrate	no	yes	no		C Oxidizing materials D1B Toxic materials D2B Toxic materials	yes		2
Magnesium	no	yes	yes		B6 Reactive flammable material; B4 Flammable solid; F Dangerously reactive material	yes		nwg
Strontium Peroxide	no	yes	no		C oxidizing material	yes		not listed
Aluminum	no	yes	yes		Not controlled	yes		nwg
Polyvinyl Chloride	no	yes	no		Not controlled	yes		not listed
Dextrin	no	no	no		Not controlled			
Potassium Nitrate	no	no	no	yes	No information found	yes		nwg
Charcoal	yes	yes	yes		No information found	yes		nwg
Sulfur		yes	yes	yes	No information found	yes		nwg
Iron	no	yes	yes		B4 flammable solid	yes		nwg
Copper	no	yes	yes		B4 Flammable solid D2B Toxic materials	yes		nwg

16. Other Information

Revision Information: July 2019

NFPA Rating		HMIS Rating	
Flammability	2	Flammability	1
Health	2	Health	3
Reactivity	1	Physical Hazard	1

Key / Legend

HMIS: hazardous material identification system
 NFPA: national fire protection association
 CAS: Chemical Abstracts Service number
 EINECS: European inventory of existing chemical substances
 OSHA PEL: occupational safety and health administration permissible exposure limit
 NIOSH TLV: national institute of occupational safety and health Threshold Limit Value
 NTP: National Toxicology Program
 IARC: International Agency for Research on Cancer
 CWA: clean water act - US

TSCA: toxic substance control act - US
 CERCLA: comprehensive environmental response compensation and liability 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

Legal Statement

This information is accurate to the best knowledge of 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 refers. 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

SAFETY DATA SHEET

1. Product and Company Identification

Marine Handheld Red Flare (HHRF)

Identified Use: Emergency signal **Use Advised Against:** Do not use indoors or inside of a vehicle.

Manufacturer's Information: Orion Safety Products
3157 N 500 W
Peru, Indiana 46970
US 1-800-851-5260
Int'l (11) 1-765-472-4375

**EMERGENCY
RESPONSE** CHEMTREC
1-800-424-9300
1-703-527-3887

2. Hazards Identification

GHS Classifications

Explosive	Category 1.4
Skin Irritation	Category 2
Eye Irritation	Category 2A
STOT-Single Exposure	Category 3

**Perchlorate Material—special handling may apply,
see www.dtsc.ca.gov/hazardouswaste/perchlorate.**

GHS Label Elements

Hazard Statements

H204	Fire or projection hazard
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Pictograms



Signal Word **Warning**

Precautionary Statements

P102	Keep out of reach of children.
P103	Read carefully and follow all instructions
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P232	Protect from moisture
P261	Avoid breathing dust/fumes.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors.
P280	Wear protective eye protection.

P370
P301/315
P302/352
P304/340/342
P305/338/351
P332/313
P501

In case of fire; use water deluge.
IF SWALLOWED: Get immediate medical advice /attention.
IF ON SKIN: Wash with plenty of soap and water.
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.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs, get medical advice/attention.
Dispose of contents / container in accordance with local and national Regulations.

Hazards Not Otherwise Classified (HNOC): produces hot flame

3. Composition / Information on Ingredients

Component	CAS #	EINCS #	Percentage
Strontium Nitrate	10042-76-9	233-131-6	<50%
Sulfur	7704-34-9	231-722-6	<25%
Potassium Perchlorate	7778-74-7	231-912-9	<20%
Polyethylene	9002-88-4	none	<5%
Potassium Chlorate	3811-04-9	231-100-4	<5%

Note: Due to Confidential Business Information, "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 if irritation occurs.
Eyes	If contents get into eyes, flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses if easily possible. Get medical aid immediately.
Ingestion	Get medical aid immediately.

Most important symptoms and effects both acute and delayed

See section 2 labeling and section 11

Indication of any immediate medical attention and special treatment needed

No data available

5. Firefighting Measures

Extinguishing Media	Water deluge	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. Flame and sparks are ejected out the open end of the flare when it functions. Do not point flare at any part of the body or flammable material.		
Further Information	No data available		

6. Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures

Do not breathe smoke or contents. 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.

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 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. When cleaning up contents, use local and/or general exhaust. Clean up avoiding dust generation and place in a well identified container. Do not absorb in sawdust or other combustible absorbents. Wash away remainder with plenty of water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for Safe Handling

Hold and point signal away from body when igniting. Hold signal downwind when burning. Avoid breathing smoke. Avoid contact with clothing and other combustible materials. Use outdoors only! Do not ignite or burn product inside a vehicle, boat cabin or building. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with skin and eyes. Avoid contact with heat, sparks, and flame. Signals should be allowed to burn to completion. Unburned and partially burned signals contain potassium perchlorate which should not be allowed to come into contact with surface and ground water. Perchlorate Material-special handling may apply. See www.dtsc.ca.gov/hazardouswaster/perchlorate.

Conditions for Safe Storage, Including Any Incompatibilities

Store in a dry place away from direct sunlight, heat and incompatible materials. 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 signals in a vehicle, boat, closed container, warehouse, or any other building.

8. Exposure Controls / Personal Protection

Control Parameters

Exposure Limits	OSHA PEL	ACGIH TLV
Strontium Nitrate	Not established	Not established
Sulfur	Not established	Not established
Potassium Perchlorate	Nuisance dust, 15 mg/m ³	Nuisance dust, 15 mg/m ³
Polyethylene	15 mg/m ³ TWA	10 mg/m ³ TWA
Potassium Chlorate	Not established	Not established

Exposure Controls

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

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

10. Stability and Reactivity

Chemical Stability: Stable **Reactivity:** No information available **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

Conditions to Avoid
Combustible materials, heat, flames, sparks and other sources of ignition. Moisture.

Incompatible Materials
Strong acids, strong fuels, ammonia salts and strong bases.

Hazardous Decomposition Products
Carbon monoxide, carbon dioxide, sulfur oxides and nitrogen oxides.

11. Toxicology Information

Ingredient acute toxicity information

Toxicology	Oral LD50	Skin LD50	LC50
Strontium Nitrate	Rat: 1892 mg/kg	Not stated	Not stated
Sulfur	Rat: 5050 mg/kg	Rat: >2020 mg/kg	Rat: >5.49 mg/L air concentration
Potassium Perchlorate	Rat: 2100 mg/kg	Not stated	Not stated
Polyethylene	Rat: 4000 mg/kg	Not stated	Not stated
Potassium Chlorate	Rat: 4000 mg/kg	2000 mg/kg (Rabbit)	No information found

Product toxicological information

Acute Toxicity	Not classified – <i>Acute Toxicity Estimate yields oral LD₅₀ over 5000 mg/kg bw</i>
Skin Irritation / Corrosion	Category 2 – <i>over 10% of ingredients classified as a Category 2 skin irritant</i>
Serious Eye Damage / Irritation	Category 2A – <i>over 10% of ingredients classified as a Category 2A eye irritant</i>
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)
Carcinogen	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	Not classified (Based on available data, the classification criteria are not met)
STOT – repeated exposure	Category 3 - <i>respiratory-over 10% of ingredients classified as a Category 3 respiratory STOT hazard</i>
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.
Delayed and immediate effects and chronic effects from short and long term exposure	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.
Interactive effects	No information found

12. Ecological Information

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

Aquatic Toxicity	<u>Potassium Chlorate</u> : fish: LC50 <i>oncorhynchus mykiss</i> (rainbow trout) 1750 mg/l – 96 hr, EC50 <i>daphnia magna</i> (water flea) 1093 mg/l 24 hr <u>Strontium Nitrate</u> : Acute toxicity - Fishes, <i>Carassius auratus</i> , LC100, 9,615 mg/l; Chronic toxicity - Fishes, <i>Gasterosteus aculeatus</i> , LC100, 2,912 mg/l <u>Sulfur</u> : Toxicity to fish LC50 – <i>Oncorhynchus mykiss</i> (rainbow trout) - > 180 mg/l – 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 – <i>Daphnia magna</i> (Water flea) - > 5,000 mg/l – 48 h
Persistence / Degradability	No information found
Bioaccumulation / Accumulation	No information found
Mobility in Environmental Media	<u>Strontium Nitrate</u> : Water: considerable solubility and mobility; Soil/sediments non-significant adsorption
Other adverse effects	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 the preferred method of disposal for pyrotechnic materials. Allow flares to burn to completion. Refer to California Code of Regulations, Title 33, Sections 67384.1-67384.10 for additional information on handling and disposal of potassium perchlorate containing materials.

14. Transportation Information

ID Number	Proper Shipping Name	Hazard Class	Packing Group	EX Number	Reportable Quantities
Domestic & International UN0373	Signal devices, hand	1.4S	n/a	EX1986040106	none
Marine pollutant: no	Special precautions for user: no information available				

15. Regulatory Information

US Regulations	TS CA	CERCLA	CWA	CAA	SARA 313	SARA 302	Acute	Chronic	Fire	Reactivity	Pressure
Strontium Nitrate	yes	no	no	no	yes	no	yes	no	no	yes	no
Sulfur	yes	no	no	no	no	no	yes	no	yes	no	no
Potassium Perchlorate	yes	no	no	no	no	no	yes	no	no	yes	no
Polyethylene	yes	no	no	no	no	no	no	no	no	no	no
Potassium Chlorate	yes	no	no	no	no	no	yes	no	no	yes	no

US States	Prop 65	NJ	PA	Canada	WHMIS	DLS	Europe	Wgk
Strontium Nitrate	no	1743	no		C Oxidizing materials D1B Toxic materials D2B Toxic materials	yes		2
Sulfur	no	1757	yes		B4 Flammable solid D2B Toxic materials	yes		1 / nwg
Potassium Perchlorate	no	1577	yes		C Oxidizing materials D1B Toxic materials	yes		1
Polyethylene	no	no	no		Not controlled	yes		Not listed
Potassium Chlorate	no	1560	yes		C Oxidizing materials D1B Toxic materials	yes		2

16. Other Information

Revision Information: March 2019

NFPA Rating		HMIS Rating	
Flammability	2	Flammability	1
Health	2	Health	3
Reactivity	1	Physical Hazard	1

Key / Legend

HMIS: hazardous material identification system
 NFPA: national fire protection association
 CAS: Chemical Abstracts Service number
 EINECS: European inventory of existing chemical substances
 OSHA PEL: occupational safety and health
 administration permissible exposure limit
 NIOSH TLV: national institute of occupational safety
 and health Threshold Limit Value
 NTP: National Toxicology Program
 IARC: International Agency for Research on Cancer
 CWA: clean water act - US

TSCA: toxic substance control act - US
 CERCLA: comprehensive environmental response
 compensation and liability 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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SAFETY DATA SHEET

1. Product and Company Identification

Marine Hand Held Orange Smoke Signal (HHOS)

Identified Use: Emergency signal

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

Manufacturers Information: Orion Safety Products
 3157 N 500 W
 Peru, Indiana 46970
 US 1-800-851-5260
 Int'l (11) 1-765-472-4375

**EMERGENCY
 RESPONSE** CHEMTREC
 1-800-424-9300
 1-703-527-3887

2. Hazards Identification

GHS Classifications

Explosive	Category 1.4	H204
Skin Irritation	Category 2	H315
Eye Irritation	Category 2A	H319
Skin Sensitization	Category 1	H317
STOT-Repeated Exposure	Category 1	H372

GHS Label Elements

Pictograms



Hazard Statements

H204	Fire or projection hazard
H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H372	Causes damage to lungs through prolonged or repeated exposure

Signal Word

Danger

Precautionary Statements

P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P232	Protect from moisture
P261	Avoid breathing dust/fumes.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors.
P280	Wear protective eye protection.

P370	In case of fire: use water deluge.
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.
P333/313	If skin irritation or rash occurs, get medical advice/attention.
P501	Dispose of contents / container in accordance with local and national Regulations.

Hazards Not Otherwise Classified (HNOC): produces hot flame and copious amount of smoke

3. Composition / Information on Ingredients

Component	CAS #	EINCS #	Percentage
Solvent Yellow Dye	842-07-9	212-668-2	<40%
Lactose	63-42-3	200-559-2	<40%
Potassium Chlorate	3811-04-9	231-100-4	<25%
Solvent Orange 7 Dye	3118-97-6	221-490-4	<20%
Strontium Carbonate	1633-05-2	216-643-7	<1%
Calcium Carbonate	1317-65-3	215-279-6	<1%
Charcoal	7440-44-0	231-153-3	<1%
Umber	12713-03-0	235-784-5	<1%
Strontium Nitrate	10042-76-9	233-131-9	<1%
Shellac	9000-59-3	232-549-9	<1%
Potassium Nitrate	7757-79-1	231-818-8	<1%
Sawdust (cellulose)	9004-34-6	232-674-9	<1%

Note: Due to Confidential Business Information, "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 if irritation occurs.
Eyes	If contents get into eyes, flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses if easily possible. Get medical aid immediately.
Ingestion	Get medical aid immediately.

Most important symptoms and effects both acute and delayed

See section 2 labeling and section 11

Indication of any immediate medical attention and special treatment needed

No data available

5. Firefighting Measures

Extinguishing Media	Water deluge	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. Contents / dust may form explosive mixtures. Flame and copious amounts of smoke are ejected out the open end of the signal when it functions. Do not point signal at any part of the body or flammable material.		
Further Information	No data available		

6. Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures

Do not breathe smoke or contents. 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.

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 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. When cleaning up contents, use local and/or general exhaust. Clean up avoiding dust generation and place in a well identified container. Do not absorb in sawdust or other combustible absorbents. Mop up exposed area with bleach to destroy color. Wash away remainder with plenty of water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for Safe Handling

Hold and point signal away from body when igniting. Hold signal downwind when burning. Avoid breathing smoke. Avoid contact with clothing and other combustible materials. Use outdoors only! Do not ignite or burn product inside a vehicle, boat cabin or building. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with skin and eyes. Avoid contact with heat, sparks, and flame. Contains strong dyes which will color all exposed areas. Signals should be allowed to burn to completion. Unburned and partially burned signals should not be allowed to come into contact with surface and ground water.

Conditions for Safe Storage, Including Any Incompatibilities

Store in a dry place away from direct sunlight, heat and incompatible materials. 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 signals in a vehicle, boat, closed container, warehouse, or any other building.

8. Exposure Controls / Personal Protection

Control Parameters

Exposure Limits	OSHA PEL	ACGIH TLV
Solvent Yellow Dye	no information found	none
Lactose	Nuisance particulate, 15 mg/m ³ of total dust	Nuisance particulate 10 mg/m ³ of total dust
Potassium Chlorate	No Airborne Exposure Limits established	No Airborne Exposure Limits established
Solvent Orange 7 Dye	No information found	No information found
Strontium Carbonate	15 mg/m ³	10 mg/m ³
Calcium Carbonate	15 mg/m ³	10 mg/m ³
Charcoal	Nuisance dust 15 mg/m ³ .	Nuisance dust 15 mg/m ³ .
Umber	30 mg/m ³	No information found
Strontium Nitrate	Not Established	Not Established
Shellac	1000 ppm	1000 ppm
Potassium Nitrate	Nuisance dust 15 mg/m ³ .	Nuisance dust 15 mg/m ³ .
Sawdust (cellulose)	5 mg/m ³	10 mg/m ³

Exposure Controls

Engineering Controls

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

Eye / Face Protection

Safety glasses or goggles

Skin Protection

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

Appearance (color, physical form, shape): orange powder

pH: No data available
Boiling Point / Range: Not applicable
Vapor Pressure: Not applicable
Odor: No data available
Flammability: No data available
Partition Coefficient: No data available
Auto Ignition Temperature: >167°F

Melting Point: No data available
Freezing Point: Not applicable
Specific Gravity: Not applicable
Odor Threshold: No data available
Flammability Limits: No data available
Viscosity: No data available

Solubility: No data available
Evaporation Rate: Not applicable
Vapor Density: Not applicable
Flash Point: No data available
Relative Density: No data available

Decomposition Temperature: No data available

10. Stability and Reactivity

Chemical Stability: Stable

Reactivity: No information available

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

Conditions to Avoid

Excessive temperatures, moisture, water, acids and ignition sources.

Incompatible Materials

Strong oxidizers, strong acids, oxidizing or reducing agents. Liquid acids of any kind. Hydrogen Fluoride, Ammonia Salts.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, nitrogen oxides.

11. Toxicology Information

Ingredient acute toxicity information

Toxicology

Solvent Yellow Dye
Lactose
Potassium Chlorate
Solvent Orange 7 Dye
Strontium Carbonate
Calcium Carbonate
Charcoal
Umber
Strontium Nitrate
Shellac
Potassium Nitrate
Sawdust (cellulose)

Oral LD50

Rat: 5000 mg/kg
Rat: 10000 mg/kg
Rat: 1870 mg/kg
Rat: 5000 mg/kg
No information found
Rat 6450 mg/kg
Rat: > 15400 mg/kg
No information found
Rat: 2750 mg/kg
Rat: 5000 mg/kg
Rat: 3750 mg/kg
Rat: > 5000 mg/kg

Skin LD50

No information found
No information found
2000 mg/kg (Rabbit)
No information found
No information found
Rabbit 500 mg/kg
Rabbit: 3 g/kg
No information found
No information found
No information found
No information found
No information found
Rabbit: >2000 mg/kg

LC50

No information found
No information found
No information found
No information found
No information found
No information found
No information found
No information found
No information found
No information found
No information found
Rat 758 mg/m³

Product toxicological information

Acute Toxicity

Not classified – *Acute Toxicity Estimate yields oral LD₅₀ over 5000 mg/kg bw*

Skin Irritation / Corrosion

Category 2 – *over 10% of ingredients classified as a Category 2 skin irritant*

Serious Eye Damage / Irritation

Category 2A – *over 10% of ingredients classified as a Category 2A eye irritant*

Respiratory / Skin Sensitization

Category 1 Skin – *over 0.1% of ingredients are classified as a Category 1 skin sensitizer*

Germ Cell Mutagen

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

Carcinogen

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

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

STOT – repeated exposure

Category 1 – *lungs over 1% of ingredients classified as a Category 1 STOT hazard*

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

Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Ingestion of contents may cause gastrointestinal irritation with nausea, vomiting and diarrhea. Inhalation will cause irritation to the lungs and mucus membrane.

Delayed and immediate effects and chronic effects from short and long term exposure

Both the solvent yellow and orange dyes may cause dermatitis in sensitive individuals.

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
	Potassium Chlorate: fish: LC50 oncorhynchus mykiss (rainbow trout) 1750 mg/l – 96 hr, EC50 daphnia magna (water flea) 1093 mg/l 24 hr
	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
Other adverse effects	Potassium Nitrate: Will likely be mobile in the environment due to its water solubility.
	No information found

13. Disposal Considerations (for spills and leakage)

Flares should be allowed to burn to completion. Dispose of partially burned flares, ash, spilled contents, contaminated product and materials used in cleaning up spills or leaks in the manner approved for pyrotechnic material in accordance with federal, state and local requirements. Open burning is preferred method of disposal for pyrotechnic materials.

14. Transportation Information

	ID Number	Proper Shipping Name	Hazard Class	Packing Group	EX Number	Reportable Quantities
Domestic & International	UN0373	Signal devices, hand	1.4S	n/a	EX1997080126	none
Marine pollutant: no						
						Special precautions for user: no information available

15. Regulatory Information

US Regulations	TS CA	CERCLA	CWA	CAA	SARA 313	SARA 302	Acute	Chronic	Fire	Reactivity	Pressure
Solvent	yes	no	no	no	yes	no	yes	yes	no	no	no
Yellow Dye	yes	no	no	no	no	no	no	no	no	no	no
Lactose	yes	no	no	no	no	no	yes	no	no	yes	no
Potassium Chlorate	yes	no	no	no	yes	no	no	yes	no	no	no
Solvent	yes	no	no	no	yes	no	no	yes	no	no	no
Orange 7 Dye	yes	no	no	no	no	no	no	no	no	yes	no
Strontium Carbonate	yes	no	no	no	no	no	no	no	no	yes	no
Calcium Carbonate	yes	no	no	no	no	no	no	no	no	yes	no
Charcoal	yes	no	no	no	no	no	no	no	no	no	no
Umber	yes	no	no	no	yes	no	no	no	no	no	no
Strontium Nitrate	yes	no	no	no	no	no	yes	no	no	yes	no
Shellac	yes	no	no	no	no	no	no	no	no	no	no
Potassium Nitrate	yes	no	no	no	yes	no	no	no	no	yes	no
Sawdust (cellulose)	yes	no	no	no	no	no	no	no	no	no	no
US States	Prop 65	NJ	PA	Canada	WHMIS		DLS	Europe	Wgk		
Solvent	yes	0509	yes		D2A Very toxic materials		yes		not listed		
Yellow Dye	no	no	no		D2B Toxic materials		yes		not listed		
Lactose	no	1560	yes		Non controlled		yes		not listed		
Potassium Chlorate	no	0506	yes		C Oxidizing materials		yes		2		
Solvent	no	0506	yes		D1B Toxic materials		yes		3		
Orange 7 Dye	no	no		yes	D2B Toxic materials		yes		nwg		
Strontium Carbonate	no	yes	yes	yes	No information found				nwg		
Calcium Carbonate	yes	yes	yes	yes	No information found				nwg		
Charcoal	yes	yes	yes		D2A Very toxic materials		yes		nwg		
Umber	yes	yes	yes	yes	D2B Toxic materials				not listed		
Strontium Nitrate	no	1743	no		No information found				not listed		
Shellac	no	0844	yes		C Oxidizing materials		yes		1		
Potassium Nitrate	no	1574	yes		D1B Toxic materials		yes		not listed		
Sawdust (cellulose)	yes	no	no		D2B Toxic materials		yes		not listed		
					No results						

16. Other Information

Revision Information: March 2019

NFPA Rating		HMIS Rating	
Flammability	2	Flammability	1
Health	2	Health	3
Reactivity	1	Physical Hazard	1

Key / Legend

HMIS: hazardous material identification system
 NFPA: national fire protection association
 CAS: Chemical Abstracts Service number
 EINECS: European inventory of existing chemical substances
 OSHA PEL: occupational safety and health
 administration permissible exposure limit
 NIOSH TLV: national institute of occupational safety
 and health Threshold Limit Value
 NTP: National Toxicology Program
 IARC: International Agency for Research on Cancer
 CWA: clean water act - US

TSCA: toxic substance control act - US
 CERCLA: comprehensive environmental response
 compensation and liability 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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SECTION 1: PRODUCT IDENTIFICATION

Product: Alcohol Prep Pads

Product Label Name: Dukal Alcohol Prep Pads (private label included)

Company Name and Address: Dukal Corporation
2 Fleetwood Court
Ronkonkoma, NY 11779

Emergency Telephone Number: 631-656-3800

Recommended use: This product is intended for use as a skin antiseptic. It is for external use only.

SECTION 2: HAZARDOUS IDENTIFICATION

Hazard Class/Category: Flammable Liquid – 3
Eye Irritation – 2B

Hazard Symbol:



Signal Word: Warning

Hazard Statements: Flammable liquid and vapor. (H226)
Causes eye irritation. (H320)

Precautionary statements:

General: Keep out of reach of children. (P102)

Eyes: IF IN EYES: Rinse cautiously with water for several minutes.
If eye irritation persists: Get medical advice/attention.
(P305+P338) (P337+P313)

SECTION 3: INFORMATION ON INGREDIENTS

Component Name	CAS #	Concentration	R Phrase
Isopropyl Alcohol	67-63-0	70%	R11
Water	7732-18-5	30%	

SECTION 4: FIRST-AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion: Do not induce vomiting. If the material is swallowed have victim drink 1-3 glasses of water to dilute stomach contents. Seek medical attention or advice.

Skin: If irritation is experienced, rinse with water. If irritation persists, seek medical attention.

Eyes: Rinse eyes with water for 15 minutes holding the eye open. Seek medical attention if irritation persists

SECTION 5: FIRE-FIGHTING MEASURES

Flammability Classification: Flammable Liquid IB Extinguishing Media: Use methods appropriate for the surrounding fire. Consider water spray or fog, carbon dioxide, dry chemical powder, or alcohol resistant foam.

Products of Combustion: Upon decomposition this product may emit carbon dioxide, carbon monoxide and/or low molecular weight hydrocarbons.

Fire Fighting Equipment/Instructions: Wear protective clothing and equipment suitable for the surrounding fire, including helmet, facemask, and self contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: For large spills wear gloves, safety glasses and when levels exceed OSHA PEL use appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Environmental Precautions: Prevent discharge to open waters.

Method for Containment: Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth.

Methods for Clean-Up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container. Wash spill area with water.

SECTION 7: HANDLING AND STORAGE

Handling: Keep away from heat, sparks and flame. Prevent contact with eyes. Use in well ventilated area.



SAFETY DATA SHEET

Storage: Keep the container tightly closed and in a cool, well ventilated place.

SECTION 8: EXPOSURE CONTROLS

Isopropyl Alcohol (67-63-0)

ACGIH: 200 ppm TWA

OSHA: 400 ppm TWA; 980 mg/m³ TWA

Engineering Controls: Normal room ventilation is usually adequate under normal use.

Personal Protective Equipment (PPE):

Eye/Face Protection: None needed under normal use – Wear goggles is exposed to unusual amount and splashing

Skin Protection: None needed under normal use -- Wear overalls or apron if splashing is possible

Respiratory Protection: May be needed if vapor concentrations are high.

General Hygiene Considerations: None needed under normal use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Non-woven cloth saturated with liquid. There may be some free liquid in packaging.

Appearance/Color: Clear

Odor: Alcohol

PH: Not Available.

Vapor Density: 2.1 (air=1)

Boiling Point: 80°C

Vapor Pressure: No data

Melting Point: No data

Freezing Point: Not Available

Flammability Properties (see section 5)

Solubility (in water): Soluble

Specific Gravity @ 25°C: 0.88-0.92

Evaporation Rate: Not Available

Octanol/Water partition coefficient : Not Available

Auto-ignition temperature: Not Available

Decomposition temperature: Not Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal ambient temperatures 70°C (21°C)

Condition to Avoid: Avoid excessive heat or sources of ignition.

Incompatible Materials: This product reacts with strong acid, strong bases, and oxidizing agents.

Hazardous Decomposition: Upon decomposition, this product evolves carbon monoxide, carbon dioxide, and/or low weight hydrocarbons.



SAFETY DATA SHEET

Hazardous Reactions: Hazardous polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

A: General Product information

Product contains isopropyl alcohol.

B: Acute Toxicity

Low order of acute toxicity is possible.

CHRONIC EFFECTS: Component

Isopropyl Alcohol (67-63-0) -- This product is not expected to cause long term adverse effects

Carcinogenicity: ACGIH A4 – Not Classifiable as a Human Carcinogen

Neurotoxicity: No information available

Mutagenicity: No information available for product.

Reproductive: This product is not expected to cause reproductive health effects

Developmental: This product is not expected to cause reproductive health effects.

Target Organs: When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood and reproductive system.

SECTION 12: ECOLOGICAL INFORMATION

Solutions of alcohols are toxic to aquatic life at moderate to low concentrations. No long-term ecological effects are likely. Concentrated solutions of alcohols and surfactants may cause damage to aquatic and terrestrial plants.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in accordance with federal state and local regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld near container. Do not incinerate closed containers. Empty containers may contain hazardous residues. Dispose of containers with care.

SECTION 14: TRANSPORTATION INFORMATION

DOT

Not Regulated as Hazardous Material under DOT 49 CFR 172.102 Special Provision 47

Proper Shipping Name

Solids containing Flammable Liquid. n.o.s. (Isopropanol)

Hazard Class

4.1

Packing Group

II

Description

Solids Containing Flammable Liquid n.o.s. (Isopropanol)

UN#

UN3175

UN-No.

UN3175

Proper Shipping Name

Solids Containing Flammable Liquid n.o.s. (Isopropanol)

Hazard Class

4.1

Packing Group

II

Description

Solids Containing Flammable Liquid n.o.s. (Isopropanol)



SAFETY DATA SHEET

IATA

Not Regulated as Hazardous Material under IATA Sec. 4.4
Special Provision A46

UN-No.

UN3175

Proper Shipping Name

Solids Containing Flammable Liquid n.o.s. (Isopropanol)

Hazard Class

4.1

Packing Group

II

Description

Solids Containing Flammable Liquid n.o.s. (Isopropanol)

Marine Pollutant

No

IMDG/IMO

Not Regulated as Hazardous Material under IMDG Ch. 3.3
Special Provision 216

UN-No.

UN3175

Proper Shipping Name

Solids Containing Flammable Liquid n.o.s. (Isopropanol)

Hazard Class

4.1

Packing Group

II

Description

Solids Containing Flammable Liquid n.o.s. (Isopropanol)

Marine Pollutant

No

DOT/IATA/IMDG Special Provisions: (DOT) Mixtures of solids that are not subject to this subchapter and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Except when the liquids are fully absorbed in solid material contained in sealed bags, for single packagings, each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level. Small inner packagings consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to this subchapter provided there is no free liquid in the packet or article. (IATA) Small inner packagings consisting of sealed packets or articles containing less than 10 mL of a Packing Group II or III flammable liquid absorbed into a solid material are not subject to these Regulations provided there is no free liquid in the packet or article. (IMDG) Sealed packets containing 10 ml or less of Class 3 flammable liquids in Packing Group II or III which are absorbed into a solid with no free liquid at the time of shipment are not regulated.



SAFETY DATA SHEET

SECTION 15: REGULATORY INFORMATION

DOT / USA

Product Description: Solid Containing Flammable Liquid n.o.s. (Isopropanol)

SECTION 16: OTHER INFORMATION

Issue Date: 03-26-14

Revision Date: 12-13-16

Disclaimer:

The information provided in this SDS is correct and is to the best of our knowledge, at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.



Corporate Headquarters
10 Glenshaw Street, Orangeburg, NY 10962
Tel: 845.365.8200 • Fax: 845.365.8201
Toll-Free: 888.DYNAREX

Reviewed on 9/16/15

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

Physical hazards	Not classified
Health hazards	Not classified
• Environmental hazards	Not determined
OSHA defined hazards	Not classified
Label elements	
• Hazard symbol	None
• Signal word	Not available
• Hazard statement	Not available
• Precautionary statement	
○ Prevention	Not available
○ Response	Not available
○ Storage	Not available
○ Disposal	Not available
Hazard(s) not otherwise classified (HNOC)	None known
Supplemental information	None



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SECTION 3. Composition/information on Ingredients

Ingredients	CAS Number	%
BZK	8001-54-5	0.13
Water	7732-18-5	99.87

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



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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.
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Personal protective equipment



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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.
Incompatibility: Caustics. Acids. Oxidizers.
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

Eye	May cause irritation
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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.
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



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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



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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.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier	#007
Product Name	First Aid Burn Cream
Product Use	Topical Antiseptic and Analgesic Skin Cream
Manufacturer	Water Jel Technologies LLC 50 Broad Street Carlstadt, New Jersey 07072
Telephone	201-507-8300
E-mail Address	www.waterjel.com
Emergency Telephone	1-800-275-3433
FAX Number	201-507-8325
Issue Date:	08-25-2015

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview:

This product is regulated by the US FDA as an over-the-counter, monograph drug.

For Consumers, consult the Drug Facts on the package for use directions and warnings information.

Warnings: For External Use Only.

When using this product, avoid contact with the eyes.

Do not use on large areas of the body or on broken, blistered or oozing skin.

Stop use and ask a doctor if condition worsens or symptoms persist for more than 7 days.

If swallowed, get medical help or contact a Poison Control Center immediately.

Physical Hazards:	This mixture does not meet the classification criteria according to OSHA Hazcom 2012.
Health Hazards:	This mixture does not meet the classification criteria according to OSHA Hazcom 2012.
Environmental Hazards:	This mixture does not meet the classification criteria according to OSHA Hazcom 2012.
OSHA Defined Hazards:	This mixture does not meet the classification criteria according to OSHA Hazcom 2012.

Label Elements:

Hazard Symbol: None

Signal Word: None

Hazard Statement: The mixture does not meet the criteria for classification.

Precautionary Statement:

Prevention	None required according to OSHA Hazcom 2012.
Response	None required according to OSHA Hazcom 2012.
Storage	None required according to OSHA Hazcom 2012.
Disposal	None required according to OSHA Hazcom 2012.

Hazards not otherwise

Classified (HNOC): None known.

Supplemental Information: None.



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Route of Entry:

Skin Contact: May cause irritation, redness, inflammation or dryness.
Skin Absorption: No adverse conditions expected.
Eye Contact: Flush eyes with clear running water for a minimum of 15 minutes; if irritation persists, seek medical attention.
Inhalation: Not expected due to form.
Ingestion: May cause irritation of the digestive tract.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical Name	Common Name and Synonyms	CAS Number	%
Benzalkonium Chloride		63449-41-2	0.13
Lidocaine HCl		6108-05-0	0.5
Glycerin	1, 2, 3, Propanetriol	56-81-5	Proprietary
Triethanolamine	Trolamine	102-71-6	Proprietary
Propylene Glycol	1, 2, 3, Propanetriol 2-Hydroxypropanol	57-55-6	Proprietary

SECTION 4: FIRST AID MEASURES

Skin Contact: Wash off with warm water and soap. Get medical attention if symptoms occur.
Skin Absorption: No adverse conditions expected.
Eye Contact: Flush eyes with clear running water for a minimum of 15 minutes; if irritation persists, seek medical attention.
Inhalation: Remove victim to fresh air.
Ingestion: May cause irritation of the digestive tract.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable: No
Means of Extinction: Use extinguishing media appropriate for surrounding fire. Use water spray, foam or dry chemical.
In fires involving large quantities of this product, the use of large streams of water should be avoided.
Use self-contained breathing apparatus when fighting fires that involve this material.
Flash Point and Method: NA
Upper Flammable Limit (% by volume): NA
Lower Flammable Limit (% by volume): NA
Autoignition Temperature (°C): NA
Explosion Data – Sensitivity to Impact: No unusual fire or explosion hazards noted.
Explosion Data – Sensitivity to Static Discharge: No unusual fire or explosion hazards noted.
Hazardous Combustion Products: Carbon oxides. Nitrogen Oxides (NOx).

NFPA Health 1 Fire 0 Reactivity 0 Other NA



SAFETY DATA SHEET

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions,
Protective equipment and
Emergency procedures: Wear appropriate personal protective equipment.

Methods and materials
for containment
and clean up:

Absorb spill with vermiculite or other inert material, then place in a sealed container for chemical waste.

Large Spills: Flush with plenty of water. Prevent entry into waterways, sewer, basements or confined areas. Dike for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental Precautions: Avoid discharge into drains and water sources.

SECTION 7: HANDLING AND STORAGE

Handling Procedures and Equipment: Keep this and other chemicals out of the reach of children.

Storage Temperature: Do not store or mix with strong acids or oxidizers. Store at room temperature.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Components	ACGIH-TLVs	OSHA-PELs	NIOSH	Form
Glycerin (CAS 57-55-8)	NE	5 mg/m3		Aerosol
Propylene Glycol (CAS 57-55-6)	10 mg/m3	NE	NE	Aerosol
Triethanolamine (CAS 102-71-6)	5 mg/m3	NE	NE	Aerosol

Biological Limit Values: No biological Exposure limits noted for the ingredients.

Ventilation and Engineering Controls: Ensure adequate ventilation.

Personal Protective Equipment: None required under normal conditions

Hand Protection: None required under normal conditions.

Eye and Face Protection: Eye protection, as necessary to prevent excessive contact.

Skin Protection: None required under normal conditions.

General Hygiene Considerations: Practice safe work habits.

Other Protective Equipment: Eye wash stations should be nearby and ready to use.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Cream.
Physical State: Cream.
Form: Cream.
Color: White, homogeneous.
Odor: Slightly fatty odor.

pH: No information available.
Boiling Point: 275°F
Melting Point: No information available.
Flash Point: N/A
Explosive Properties: No information available.
Oxidizing Properties: No information available.
Specific Gravity: 0.81
Water Solubility: Miscible.
Partition Coefficient: No information available.
Viscosity: No information available.
Vapor Pressure (mm Hg): No information available.
Vapor Density (Air=1): No information available.
Evaporation Rate: No information available.
% Volatile: No information available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use.
Chemical Stability: Stable at normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization does not occur.
Conditions to Avoid: Extreme heat.
Materials to Avoid: Strong oxidants and strong acids.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Symptoms of Overexposure by Route of Exposure:
The health hazard information provided is for handling this product in an occupational setting.

Effects of Acute and Chronic Exposure:

Acute: The primary health effect that may be experienced in an occupational setting is mild irritation of contaminated skin. Accidental ingestion may be harmful. Although unlikely, irritation can irritate the respiratory system. Eye contact will cause irritation.

Chronic: NE

Target Organs: Acute: Occupational exposure: Skin, eyes.
Chronic: Occupational exposure: Skin.

Inhalation:
Mist may slightly irritate the nose, throat and lungs. Symptoms are generally alleviated upon breathing fresh air.



SAFETY DATA SHEET

Skin Contact:

Skin contact may cause burning sensation, stinging, itching and tingling.

Eye Contact:

Eye contact can cause irritation, stinging, redness and tearing.

Ingestion:

Ingestion is not a significant route of occupational overexposure. Acute ingestion of large quantities of this product or chronic ingestion may cause adverse symptoms that may include nausea, vomiting and diarrhea.

Irritancy of the Product:

This product may cause mild to moderate irritation on damaged skin.

Skin Sensitization:

Not expected.

Respiratory Sensitization:

Not expected.

LD50/LC50:

Propylene Glycol (CAS 57-55-6)

- Oral (rat): 2200mg/k
- Dermal: (rabbit) 20800 mg/k

Triethanolamine):

- Oral (rat): 6110 mg/kg
- Dermal: (rabbit): >19870 mg/k

Glycerin (Mist):

- Oral (rat): 12,600 mg/kg
- Subcutaneous (rat): Not Available

Carcinogenicity: Not classified as a human carcinogen by IARC or ACGIH.

Reproductive Toxicity:

Mutagenic/Embryo Toxicity: The components of this product are not reported to cause mutagenic or embryonic effects in humans.

Teratogenicity: Not available.

Reproductive Toxicity: Not available.

SECTION 12: ECOLOGICAL INFORMATION

No specific information is currently available on the effect of this product on plants or animals in the environment. The product may be harmful to contaminated terrestrial and aquatic plant life in large quantities. The following aquatic toxicity data currently available for components of this product:

Propylene Glycol:

EC50 Green Algae (*Desmodesmus subspicatus*) 19000 mg/l 96 hours

EC50 Water Flea (*Daphnia magna*) 43500 mg/l 48 hours

LC 50 Fathead Minnow (*Pimephales promelas*) 46500 mg/l 96 hours



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Triethanolamine:

EC50 Green Algae (*Desmodesmus subspicatus*) 512 mg/l 72 hours

NOEC Water Flea (*Daphnia magna*) 16 mg/l 21 days

LC 50 Fathead Minnow (*Pimephales promelas*) 11800 mg/l 96 hours

Environmental Exposure Controls: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

No component of this product is known to have ozone depletion potential.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Collect or dispose in sealed containers at licensed waste disposal site.
Dispose in accordance with local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Classification: Not regulated for Domestic Transport.
IATA Classification: Not regulated for International Transport.
IMDG Classification: Not regulated for International Water Transport.

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA (TOXIC SUBSTANCE CONTROL ACT): Not regulated.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not listed.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT) 304: Not regulated.

SARA 311/312 HAZARD CATEGORIES: Not regulated.

SARA 313 REPORTABLE INGREDIENTS: Not listed.

STATE REGULATIONS:

California Prop 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

New Jersey RTK:

Glycerin (CAS 56-81-5)

Propylene Glycol (CAS 57-55-6)

Triethanolamine (CAS 102-71-6)

Massachusetts RTK:

Triethanolamine (CAS 102-71-6)

Pennsylvania RTK:

Propylene Glycol (CAS 57-55-6)

Triethanolamine (CAS 102-71-6)

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INTERNATIONAL REGULATIONS:

<u>Country or Region</u>	<u>Inventory Name</u>	<u>Listed</u>
Australia	Australia Inventory of Chemical Substances	No
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substance List (NDSL)	No
China:	Inventory of Existing Chemical Substances In China (IECSC)	Yes
Europe	European List of Notified Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substance Control Act (TSCA) Inventory	No

Note: A "Yes" indicates that all components comply with the inventory requirements administered by the governing country.
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country.

SECTION 16: OTHER INFORMATION

Issue Date: 08-25-2015

Version: 02

Disclaimer:

The information provided in this Safety Data Sheet (SDS) is accurate to the best of our knowledge. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or processes.

SECTION 1: PRODUCT IDENTIFICATION

Product: Sting Relief Pad

Product Label Name: Sting Relief Pad

Company Name and Address: Dukal Corporation
2 Fleetwood Court
Ronkonkoma, NY 11779

Emergency Telephone Number: 631-656-3800

SECTION 2: HAZARDOUS IDENTIFICATION

Hazard Class/Category: Flammable Liquid – 3
Eye Irritation – 2B

Hazard Symbol:



Signal Word: Warning

Hazard Statements: Flammable liquid and vapor. (H226)
Causes serious eye irritation. (H319)
May cause drowsiness or dizziness. (H336)

Precautionary statements:

General: Keep out of reach of children. (P102)

Eyes: IF IN EYES: Rinse cautiously with water for several minutes.
If eye irritation persists: Get medical advice/attention.
(P305+P338) (P337+P313)

Respiratory: None

SECTION 3: INFORMATION ON INGREDIENTS

Component Name	CAS #	Concentration	R Phrase
Isopropyl Alcohol	67-63-0	60%	R11
Benzocaine	94-09-7	6%	
Water	7732-18-5	34%	

Chemical Formula: NH₂C₆H₄COOC₂H₅ / CH₃CHOHCH₃



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SECTION 4: FIRST-AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion: Do not induce vomiting. If the material is swallowed have victim drink 1-3 glasses of water to dilute stomach contents. Seek medical attention or advice.

Skin: If irritation is experienced, discontinue use. If irritation persists, seek medical attention.

Eyes: Rinse eyes with cool water for 15 minutes holding the eye open. Seek medical attention if irritation persists

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: 68.5°F, TOC Method

Flammable Limits: 750°F

Extinguishing Media: Use methods appropriate for the surrounding fire. Suggested: CO₂, dry chemical powder, or alcohol resistant foam.

Products of Combustion: Upon decomposition this product may emit carbon dioxide, carbon monoxide and/or low molecular weight hydrocarbons.

Fire Fighting Equipment/Instructions: Wear protective clothing and equipment suitable for the surrounding fire, including helmet, facemask, and self contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: For large spills wear gloves, safety glasses and when levels exceed OSHA PEL use appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Environmental Precautions: Prevent discharge to open waters.

Method for Containment: Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth.

Methods for Clean-Up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container. Wash spill area with water.



SAFETY DATA SHEET

SECTION 7: HANDLING AND STORAGE

Handling: Keep away from heat, sparks and flame. Prevent contact with eyes. Use in well ventilated area.

Storage: Keep the container tightly closed and in a cool, well ventilated place.

SECTION 8: EXPOSURE CONTROLS

Isopropyl Alcohol (67-63-0)

ACGIH OEL: 200 ppm TWA

OSHA OEL: 400 ppm TWA; 980 mg/m³ TWA

Engineering Controls: Normal room ventilation is usually adequate under normal use.

Personal Protective Equipment (PPE):

Eye/Face Protection: None needed under normal use – Wear goggles if exposed to unusual amount and splashing

Skin Protection: None needed under normal use -- Wear overalls or apron if splashing is possible

Respiratory Protection: May be needed if vapor concentrations are high.

General Hygiene Considerations: None needed under normal use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Individually sealed Sting Relief Packet. Packet may contain some free liquid.

Appearance/Color: White Non-Woven cloth saturated with clear solution

Odor: Alcohol

PH: Not Available.

Vapor Pressure: Not Available.

Flammability Properties (see section 5)

Solubility (in water): Chemical Is Soluble, Pad Not Soluble

Specific Gravity @ 25°C: 0.8405

Evaporation Rate: Not Available

Auto-ignition temperature: Not Available

Decomposition temperature: Not Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal ambient temperatures 70°C (21°C)

Condition to Avoid: Avoid excessive heat or sources of ignition.

Incompatible Materials: This product reacts with strong acid, strong bases, and oxidizing agents.

Hazardous Decomposition: Not Available.

Hazardous Reactions: Hazardous polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

A: General Product information

Product contains isopropyl alcohol.

B: Acute Toxicity

Low order of acute toxicity is possible.

CHRONIC EFFECTS: Component

Isopropyl Alcohol (67-63-0) -- This product is not expected to cause long term adverse effects

Carcinogenicity: Not Classifiable as a Human Carcinogen

Reproductive: This product is not expected to cause reproductive health effects

Developmental: This product is not expected to cause reproductive health effects.

Target Organs: When consumed, isopropyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood and reproductive system.

SECTION 12: ECOLOGICAL INFORMATION

Mixtures of alcohols are toxic to aquatic life at moderate to low concentrations. No long-term ecological effects are likely. Concentrated solutions of alcohols and surfactants may cause damage to aquatic and terrestrial plants.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in accordance with federal state and local regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld near container. Do not incinerate closed containers. Empty containers may contain hazardous residues. Dispose of containers with care.

SECTION 14: TRANSPORTATION INFORMATION

DOT

Not Regulated as Hazardous Material under DOT 49 CFR 172.102 Special Provision 47

Proper Shipping Name

Solids containing Flammable Liquid. n.o.s. (Isopropanol)

Hazard Class

4.1

Packing Group

II

Description

Solids Containing Flammable Liquid n.o.s. (Isopropanol)

UN#

UN3175



SAFETY DATA SHEET

UN-No.	UN3175
Proper Shipping Name	Solids Containing Flammable Liquid n.o.s. (Isopropanol)
Hazard Class	4.1
Packing Group	II
Description	Solids Containing Flammable Liquid n.o.s. (Isopropanol)

IATA	Not Regulated as Hazardous Material under IATA Sec. 4.4 Special Provision A46
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UN-No.	UN3175
Proper Shipping Name	Solids Containing Flammable Liquid n.o.s. (Isopropanol)
Hazard Class	4.1
Packing Group	II
Description	Solids Containing Flammable Liquid n.o.s. (Isopropanol)
Marine Pollutant	No

IMDG/IMO	Not Regulated as Hazardous Material under IMDG Ch. 3.3 Special Provision 216
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UN-No.	UN3175
Proper Shipping Name	Solids Containing Flammable Liquid n.o.s. (Isopropanol)
Hazard Class	4.1
Packing Group	II
Description	Solids Containing Flammable Liquid n.o.s. (Isopropanol)
Marine Pollutant	No

DOT/IATA/IMDG Special Provisions: (DOT) Mixtures of solids that are not subject to this subchapter and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Except when the liquids are fully absorbed in solid material contained in sealed bags, for single packaging, each packaging must correspond to a design type that has passed a leak-proof test at the Packing Group II level. Small inner packaging consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to this subchapter provided there is no free liquid in the packet or article. (IATA) Small inner packaging consisting of sealed packets or articles containing less than 10 mL of a Packing Group II or III flammable liquid absorbed into a solid material are not subject to these Regulations provided there is no free liquid in the packet or article. (IMDG) Sealed packets containing 10 ml or less of Class 3 flammable liquids in Packing Group II or III which are absorbed into a solid with no free liquid at the time of shipment are not regulated.

SECTION 15: REGULATORY INFORMATION

DOT / USA

Product Description:	Solid Containing Flammable Liquid n.o.s. (Isopropanol)
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OSHA Standard Format



SAFETY DATA SHEET

SECTION 16: OTHER INFORMATION

Issue Date: 03-26-2014
Revision Date: 04-15-2017

Disclaimer:

The information provided in this SDS is correct and is to the best of our knowledge, at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.