SAFETY DATA SHEET

EFFECTIVE DATE: 8/25/2017

ITEM: 12 Gauge HP Alerter Plus Signal Kit

PART #	**UPC**
535	077403221714

CONTENTS:

12GA Long Shell (HP) Marine Red Aerial Signal SDS
Fluorescein Dye Marker SDS

SHIPPING INFORMATION

UN0403, Flares, Aerial, 1.4G (ERG 114)
EX2004110275

SAFETY DATA SHEET

1. Product and Company Identification

12 Ga HP (High Performance) Red Aerial Signal

Identified Use: Emergency distress signal Use Advised Against: Do not use indoors or inside a vehicle

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

EMERGENCY

CHEMTREC
1-800-424-9300

2. Hazards Identification

GHS Classifications

Explosive	Category 1.4	H204
Skin Irritation	Category 2	H315
Eye Damage / Irritation	Category 1	H318
Carcinogenicity	Category 2	H351
STOT - Single Exposure	Category 3	H335

GHS Label Elements

Pictograms

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

Signal Word Danger

Precautionary Statements
- P103 Keep out of reach of children
- P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P232 Protect from moisture
- P261 Avoid breathing dust/fume
- 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
- 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.
- P370 In case of fire: use water deluge

Hazards Not Otherwise Classified (HNOC): none

3. Composition / Information on Ingredients

Component	CAS #	EINCS #	%age
Polypropylene	9003-07-0	polymer	<60%
Glass Fibers	65997-17-3	266-046-0	<20%
Strontium Nitrate	10042-76-9	233-131-9	<10%
Magnesium	7439-95-4	231-104-6	<10%
Olefinic Thermoplastic Rubber	mixture	mixture	<10%
Strontium Peroxide	1314-18-7	215-224-6	<10%
Aluminum	7429-90-5	231-072-3	<5%
PVC	9002-86-2	none	<5%
Black Powder	mixture	none	<5%
Iron	1309-37-1	231-096-4	<5%
Copper	7440-50-8	231-159-6	<3%

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 if 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. 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 quantities 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 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. 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 contents and inhalation of smoke. Wash thoroughly after handling. Avoid contact with heat sparks, and flame. Do not disassemble signal.
Conditions for Safe Storage, Including Any Incompatibilities	Store away from moisture, 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
Polypropylene	Not Established	Not Established
Glass Fibers	15 mg/m3 (as total nuisance dust); 5 mg/m3 (as respirable nuisance dust)	1 f/cc TWA (respirable fibers, length >5 µm, aspect ratio >=3:1
Strontium Nitrate	Not Established	Not Established
Magnesium	Not Established	Not Established
Olefinic Thermoplastic Rubber	Not Established	Not Established
Strontium Peroxide	Nuisance dust 15 mg/m³.	Nuisance dust 15 mg/m³.
Aluminum	TWA: 15 mg/m3	TWA: 1 mg/m3
Polyvinyl Chloride	5mg/ml for the respirable portion and 15mg/ml' for total dust.	5 and 10mg/ml, respectively
Black Powder	Not Established	Not Established
Iron	TWA 10 mg/m³	Not Established
Copper	0.1 mg/m3 (fume) 1 mg/m3 (dusts and mists)	0.2 mg/m3 (fume), 1 mg/m3 (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 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:	Not available	Melting Point:	Not available	Solubility:	Not available
Boiling Point / Range:	Not applicable	Freezing Point:	Not applicable	Evaporation Rate:	Not applicable
Vapor Pressure:	Not applicable	Specific Gravity	Not applicable	Vapor Density:	Not applicable
Odor:	No data available	Odor Threshold:	No data available	Flash Point:	Not available
Flammability:	No data available	Flammability Limits:	No data available	Relative Density:	No data available
Partition Coefficient:	No data available	Viscosity:	No data available		
Auto Ignition Temperature:	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	Incompatible Materials	Hazardous Decomposition Products
Excessive temperatures, moisture, acids, and ignition sources.	Reducing Agents, Organic Materials, Finely Powdered Metals, Acids, Water, Halogens.	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
Polypropylene	Rat: >5000 mg/kg	not available	not available
Glass Fibers	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
Olefinic Thermoplastic Rubber	non toxic	non toxic	non toxic
Strontium Peroxide	Rat: 980 mg/kg	Not available	Not available
Aluminum	Rat : > 2,000 mg/kg	Rat - 4 h - > 888 mg/l	not available
Polyvinyl Chloride	Rat: >5000 mg/kg	Not available	Not available
Black Powder	Rat: 5000 mg/kg	Not available	Not available
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 – *Acute Toxicity Estimate yields oral LD_{50} over 5000 mg/kg bw 17% unknown*
Skin Irritation / Corrosion	Category 2 – *over 0.1% of ingredients classified as a Category 2*
Serious Eye Damage / Irritation	Category 1 – *over 0.1% of ingredients classified as a Category 1*
Respiratory / Skin Sensitization	No information found
Germ Cell Mutagen	No information found
Carcinogen	Category 2 – *over 0.1% of ingredients classified as Category 2 carcinogens*
Reproductive Toxicity	No information found
STOT – single exposure	Category 3 – respiratory *over 20% of ingredients classified as a Category 3 respiratory STOT hazard*
STOT – repeated exposure	No information found
Aspiration Hazard	No information found
Likely routes of exposure	Skin, ingestion, inhalation
Symptoms related to the physical, chemical and toxicological characteristics	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	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.
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	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
Polypropylene	yes	no	no	no	no	no	no	no	no	no	no
Glass Fibers	yes	no	no	no	no	no	yes	yes	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
Olefinic Thermoplastic Rubber	yes	no	no	no	no	no	no	no	no	no	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
Black Powder	yes	no	no	no	no	no	yes	yes	yes	yes	yes
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
Polypropylene	no	yes	yes		Not controlled	yes		not listed
Glass Fibers	yes	yes	yes		Class D2A – Very toxic material C Oxidizing materials	yes		not listed
Strontium Nitrate	no	yes	no		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
Olefinic Thermoplastic Rubber	no	no	no		No information found	unknown		not listed
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
Black Powder	yes	yes	no		D-2B: Material causing other toxic effects	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: June 2015

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

TSCA: toxic substance control act - US
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

SAFETY DATA SHEET

1. Product and Company Identification

Fluorescein Dye Marker

Identified Use: Emergency distress signal Use Advised Against: none

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

EMERGENCY CHEMTREC
1-800-424-9300

2. Hazards Identification

GHS Classifications

Eye Damage / Irritation	Category 1	H318
STOT - Single Exposure	Category 3	H335

GHS Label Elements

Pictograms

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

Signal Word Danger

Precautionary Statements
P103 Keep out of reach of children
P370 In case of fire: use water deluge

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.

Hazards Not Otherwise Classified (HNOC): none

3. Composition / Information on Ingredients

Component	CAS #	EINCS #	%age
Sodium Fluorescein	518-47-8	208-253-0	>50%
Sodium Bicarbonate	144-55-8	205-633-8	<50%
Adipic Acid	124-04-9	204-673-3	<20%

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 if 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. 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.

Specific Hazards Arising from the Chemical: Avoid dust / air suspensions. As with any organic powder, the contents may be capable of a dust explosion fire.

Further information: No data available

6. Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures

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

Environmental Precautions

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

Methods for Containment and Clean-up

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

7. Handling and Storage

Precautions for Safe Handling	Contents will stain – handle with caution. Wear appropriate eye protection when using. Follow instructions on package. Avoid ingestion and inhalation of contents. Wash thoroughly after handling. Do not disassemble signal.
Conditions for Safe Storage, Including Any Incompatibilities	Store in a cool, dry place. Store away from food and beverages. Keep at temperature not exceeding: 60 °C (140 °F)

8. Exposure Controls / Personal Protection

Control parameters

Exposure Limits	OSHA PEL	ACGIH TLV
Sodium Fluorescein	Not Established	Not Established
Sodium Bicarbonate	Not Established	Not Established
Adipic Acid	None established	5 mg/m3

Exposure controls

Engineering Controls	When cleaning up contents, use local and/or general exhaust.
Personal Protective Equipment	
Eye / Face Protection	Wear safety glasses or goggles when cleaning up spilled contents.
Skin Protection	No significant health effects but contents will stain all exposed areas. Wear Tyvek coveralls, rubber or nitrile gloves, and booties if available. If not, wear clothing with long sleeves, long pant legs, rubber or nitrile gloves, and safety shoes when cleaning up contents.. Wash hands and face before eating, drinking or using tobacco products.
Respiratory Protection	None under normal conditions when using product. A particulate respirator (NIOSH t N95 or better filters) may be worn during the cleanup of spilled contents.
General Hygiene	Educate and train employees in the safe use and handling of hazardous materials. Maintain good housekeeping and safety practices. Do not let contents accumulate in storage or work areas. Clean spills up promptly.

9. Physical and Chemical Properties

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

pH:	Not available	Melting Point:	Not available	Solubility:	Not available
Boiling Point / Range:	Not applicable	Freezing Point:	Not applicable	Evaporation Rate:	Not applicable
Vapor Pressure:	Not applicable	Specific Gravity	Not applicable	Vapor Density:	Not applicable
Odor:	No data available	Odor Threshold:	No data available	Flash Point:	Not available
Flammability:	No data available	Flammability Limits:	No data available	Relative Density:	No data available
Partition Coefficient:	No data available	Viscosity:	No data available		
Auto Ignition Temperature:	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	Incompatible Materials	Hazardous Decomposition Products
Excessive temperatures, moisture, acids, and ignition sources.	Oxidizing agents, acids	Nitrogen oxides, carbon monoxide, carbon dioxide

11. Toxicology Information

Ingredient acute toxicity information

Toxicology	Oral LD50	skin LD50	LC50
Sodium Fluorescein	Rat - 6,721 mg/kg	not available	not available
Sodium Bicarbonate	Rat: 4220 mg/kg	not available	not available
Adipic Acid	Rat: 5,560 mg/kg	Rabbit: 7,940 mg/kg	Rat: 4 h - > 7.7 mg/l

Product toxicological information

Acute Toxicity	Not classified – *Acute Toxicity Estimate yields oral LD_{50} over 5000 mg/kg bw*
Skin Irritation / Corrosion	No information found
Serious Eye Damage / Irritation	Category 1 – *over 0.1% of ingredients classified as a Category 1*
Respiratory / Skin Sensitization	No information found

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

12. Ecological Information

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

Aquatic Toxicity	Sodium Fluorescein – *LC50 Oncorhynchus mykiss (rainbow trout) - 1,372 mg/l - 96 h; EC50 - Daphnia pulex (Water flea) - 337 mg/l - 48 h* Sodium Bicarbonate – *LC50 freshwater fish 8250 - 9000 mg/L 96 h ; EC50: freshwater algae 650 mg/L/120h; EC50: 2350 water flea mg/L/48h* Adipic Acid – *LC50 - Brachydanio rerio (zebrafish) >= 1,000 mg/l - 96 h; LC50 - Daphnia magna (Water flea) - 46 mg/l - 48 h; EC50 - Pseudokirchneriella subcapitata (aglae) - 59 mg/l - 72 h*
Persistence / Degradability	Sodium Bicarbonate - *Soluble in water Persistence is unlikely based on information available* Adipic Acid - *Readily biodegradable*
Bioaccumulation / Accumulation	No information found
Mobility in Environmental Media	Sodium Bicarbonate - *Will likely be mobile in the environment due to its water solubility*
Other adverse effects	No information found

13. Disposal Considerations (for spills and leakage)

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

14. Transportation Information

	ID Number	shipping name	hazard class	packing group	EX Number	Reportable Quantities
Domestic & International	none	Non-hazardous	none	none	none	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
Sodium Fluorescein	8(b)	no	no	no	no	no	no	yes	no	no	no
Sodium Bicarbonate	yes	no	no	no	no	no	yes	yes	no	no	no
Adipic Acid	yes	yes	yes	no	no	no	yes	no	no	no	no

US States	Prop 65	NJ	PA	Canada	WHMIS	**DSL**	Europe	wgk
Sodium Fluorescein	no	yes	yes		D2B Toxic materials	yes		Not listed
Sodium Bicarbonate	no	no	no		D2B Toxic materials	yes		1
Adipic Acid	no	yes	yes		D2B Toxic materials	yes		1

16. Other Information

Revision Information: June 2015

NFPA Rating		HMIS Rating	
Flammability	2	Flammability	2
Health	1	Health	1
Reactivity	0	Physical Hazard	0

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

TSCA: toxic substance control act - US
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