

SDSD9148

ITEM: 45MG26 Nonspike Flares, 17-1/2 in. L, 30 min, PK36

DELIVERY: 6613627925

HU NUMBER: U803117196

SAFETY DATA SHEET (SDS)

This SDS should be attached or kept with the respective product with which it is associated.

SDS - D9148

Associated Items
45MG26ORION(R)
THE BRIGHTEST NAME IN SAFETY

SAFETY DATA SHEET

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

RED EMERGENCY FLARE - NO PERCHLORATE (NPC) FORMULATION

IDENTIFICATION:
THE NPC FLARE WILL HAVE THE FOLLOWING SYMBOL ON IT:
IMPROVED ECO-FRIENDLY FORMULASYNONYMS:
EMERGENCY ROAD FLARE
RAILWAY FLARE
NSN#: 1370-01-009-2593

IDENTIFIED USE: EMERGENCY SIGNAL

USE ADVISED AGAINST: DO NOT USE INDOORS OR INSIDE A VEHICLE

MANUFACTURERS INFORMATION:
ORION SAFETY PRODUCTS
28320 ST. MICHAELS RD
EASTON, MD 21601
800-637-7807
410-822-0318EMERGENCY:
CHEMTREC: 1-800-424-9300

-----2. HAZARDS IDENTIFICATION -----

GHS CLASSIFICATIONS:
SKIN IRRITATION CATEGORY 2 H315
EYE IRRITATION CATEGORY 2A H319
STOT - SINGLE EXPOSURE CATEGORY 3 H335

GHS LABEL ELEMENTS:

PICTOGRAMS: EXCLAMATION MARK

SIGNAL WORD: WARNING

HAZARD STATEMENTS:
H315/319: CAUSES SKIN AND SERIOUS EYE IRRITATION
H335: MAY CAUSE RESPIRATORY IRRITATIONPRECAUTIONARY STATEMENTS:
P103: KEEP OUT OF REACH OF CHILDREN

P261: AVOID BREATHING DUST/SMOKE.

P264: WASH HANDS THOROUGHLY AFTER HANDLING.

P270: DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.

P271: USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.

P280: WEAR PROTECTIVE EYE PROTECTION

P370:
IN CASE OF FIRE: USE WATER DELUGEP501:
DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH LOCAL AND NATIONAL REGULATIONS.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): PRODUCES HOT FLAME

-----3. COMPOSITION / INFORMATION ON INGREDIENTS -----

COMPONENT	CAS #	EINCS #	%AGE
STRONTIUM NITRATE	10042-76-9	233-131-9	<75%
SULFUR	7704-34-9	231-722-6	<25%
POTASSIUM NITRATE	7757-79-1	231-818-8	<25%
PARAFFINIC OIL	64742-54-7	232-384-2	<10%
POTASSIUM CHLORATE	3811-04-9	231-100-4	<5%
WAXY SAWDUST	MIXTURE	NONE	<5%
POLYVINYL CHLORIDE	9002-86-2	200-831-0	<5%
SHELLAC	MIXTURE	NONE	<1%
CHARCOAL	1333-86-4	231-153-3	<1%

NOTE:
DUE TO CONFIDENTIAL BUSINESS INFORMATION I.E "TRADE SECRETS", THE EXACT PERCENTAGE OF EACH INGREDIENT HAS NOT BEEN DISCLOSED. CBI INFORMATION WILL BE SHARED WITH APPROPRIATE AUTHORITIES IF CIRCUMSTANCES WARRANT.

-----4. FIRST AID MEASURES -----

DESCRIPTION OF FIRST AID MEASURES:

INHALATION:
IF CONTENTS ARE INHALED, REMOVE TO FRESH AIR. WATCH FOR SIGNS OF ALLERGIC REACTION. IF OTHER SYMPTOMS DEVELOP, GET MEDICAL AID IMMEDIATELY.SKIN:
IF CONTENTS ARE CONTACTED, WASH WITH AREA WITH SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. GET MEDICAL AID IMMEDIATELY IF BURNED OR IRRITATION OCCURS.EYES:
IF CONTENTS GET INTO EYE, FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING THE UPPER AND LOWER LIDS. REMOVE CONTACT LENSES IF EASILY POSSIBLE. DO NOT USE BORIC ACID TO RINSE WITH; SULFUR IS AN ACID IRRITANT. GET MEDICAL AID IMMEDIATELY.

INGESTION: GET MEDICAL AID IMMEDIATELY.

MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED:
SEE SECTION 2 LABELING AND SECTION 11INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:
BURNING FLARE CAN CAUSE SEVERE BURNS IF IN CONTACT WITH BODY. FOR BURNS TO SKIN, COOL WITH WATER AND BANDAGE APPROPRIATELY. SEEK MEDICAL ATTENTION. IF EYE IS BURNED, COVER EYE AND GET MEDICAL AID IMMEDIATELY

-----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 UNBURNED NEARBY PRODUCT WITH WATER. COMBAT FIRE FROM A SHELTERED POSITION.SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:
USE COPIOUS AMOUNTS OF WATER TO EXTINGUISH FIRE COMPRISED OF FLARES. FLARES CONTAIN OXIDIZERS AND WILL CONTINUE TO BURN UNLESS A SIGNIFICANT AMOUNT OF WATER IS USED. DO NOT BREATHE SMOKE.

FURTHER INFORMATION: NO DATA AVAILABLE

-----6. ACCIDENTAL RELEASE MEASURES -----

PERSONAL PRECAUTIONS / PROTECTIVE EQUIPMENT / EMERGENCY PROCEDURES:
DO NOT BREATHE CONTENTS AND AVOID CONTACT WITH SKIN AND EYES. WEAR FLAME RETARDANT CLOTHING WITH LONG SLEEVES, DUST MASK, RUBBER OR NITRILE GLOVES, SAFETY GOGGLES, SAFETY SHOES. AVOID FRICTION ON THE RELEASED PRODUCT. KEEP AWAY FROM IGNITION SOURCES.ENVIRONMENTAL PRECAUTIONS:
PREVENT DISPERSION OF CONTENTS ON SOIL AND IN WATER. PREVENT CONTENTS FROM SPREADING OR ENTERING INTO DRAINS, DITCHES, GROUNDWATER OR RIVERS BY USING APPROPRIATE BARRIERS.METHODS FOR CONTAINMENT AND CLEAN-UP:
USE CAUTION WHEN CLEANING UP SPILLED PRODUCT CONTENTS. REMOVE HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION. USE NON-SPARKING TOOLS AND EQUIPMENT. PREVENT BUILDUP OF ELECTROSTATIC CHARGES BY GROUNDING. CLEAN SPILLS IN A MANNER THAT DOES NOT DISPERSE DUST INTO THE AIR. DO NOT ABSORB IN SAWDUST OR OTHER COMBUSTIBLE ABSORBENTS. PICK UP SPILL FOR RECOVERY OR DISPOSAL AND PLACE IN AN APPROVED CONTAINER. WASH AWAY REMAINDER WITH PLENTY OF WATER. COLLECT WASH WATER FOR APPROVED DISPOSAL.

-----7. HANDLING AND STORAGE -----

PRECAUTIONS FOR SAFE HANDLING:
HOLD AND POINT FLARE AWAY FROM BODY WHEN IGNITING. EXERCISE CAUTION WHEN USING THIS PRODUCT SINCE MOLTEN FLECKS MAY BE EMITTED. PRODUCES HOT FLAME. BURNING FLARE CAN CAUSE SEVERE BURNS IF IN CONTACT WITH BODY. AVOID CONTACT WITH CLOTHING AND OTHER COMBUSTIBLE MATERIALS. WEAR EYE PROTECTION DURING USE. FOLLOW INSTRUCTIONS ON PACKAGE. USE OUTDOORS ONLY! DO NOT IGNITE OR BURN PRODUCT INSIDE A VEHICLE OR BUILDING. AVOID INHALATION OF SMOKE. DO NOT DISMANTLE. DO NOT ALLOW CONTENTS TO TOUCH EYES, SKIN OR CLOTHING. DO NOT INGEST CONTENTS AS THEY MAY BE HARMFUL IF SWALLOWED. WASH THOROUGHLY AFTER HANDLING. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. AVOID CONTACT WITH HEAT, SPARKS, AND FLAME.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:
STORE AWAY FROM DIRECT SUNLIGHT, HEAT AND INCOMPATIBLE MATERIALS. SEE SECTION 10. STORE AWAY FROM FOOD AND BEVERAGES. STORE AWAY FROM FLAMMABLE MATERIALS, SOURCES OF HEAT, FLAME AND SPARKS. STORE AT AMBIENT TEMPERATURE. DO NOT STORE PARTIALLY BURNED FLARES IN A VEHICLE, WAREHOUSE, OR ANY OTHER BUILDING. PLASTIC BAGS ARE PROVIDED FOR MOISTURE PROTECTION. KEEP PARTIALLY USED BAGS SEALED AT ALL TIMES.

-----8. EXPOSURE CONTROLS / PERSONAL PROTECTION -----

CONTROL PARAMETERS:

EXPOSURE LIMITS	OSHA PEL	ACGIH TLV
STRONTIUM NITRATE	NOT ESTABLISHED	NOT ESTABLISHED
SULFUR	NOT ESTABLISHED	NOT ESTABLISHED
POTASSIUM NITRATE	NUISANCE DUST 15 MG/M3.	NUISANCE DUST 15 MG/M3.
PARAFFINIC OIL	5 MG/M3	TWA 5 MG/M3
POTASSIUM CHLORATE	NO AIRBORNE EXPOSURE LIMITS ESTABLISHED	NO AIRBORNE EXPOSURE LIMITS ESTABLISHED
WAXY SAWDUST	NOT ESTABLISHED	NOT ESTABLISHED
POLYVINYL CHLORIDE	NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT.	NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT.

SHELLAC NOT ESTABLISHED NOT ESTABLISHED

CHARCOAL NUISANCE DUST 15 MG/M3. NUISANCE DUST 15 MG/M3.

EXPOSURE CONTROLS:

ENGINEERING CONTROLS:
USE PRODUCT OUTDOORS ONLY!

WHEN CLEANING UP CONTENTS, USE LOCAL AND/OR GENERAL EXHAUST.

PERSONAL PROTECTIVE EQUIPMENT:

EYE / FACE PROTECTION: SAFETY GLASSES OR GOGGLES

SKIN PROTECTION:
NONE UNDER NORMAL CONDITIONS WHEN USING PRODUCT UNLESS PROLONGED HANDLING IS ANTICIPATED. IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING GLOVES, BOOTS, AND A LAB COAT, APRON OR COVERALLS, AS APPROPRIATE, WHEN CLEANING UP SPILLED PRODUCT. WASH HANDS AND FACE BEFORE EATING, DRINKING OR USING TOBACCO PRODUCTS.

RESPIRATORY PROTECTION:
NONE UNDER NORMAL CONDITIONS WHEN USING PRODUCT. A PARTICULATE RESPIRATOR (NIOSH T N95 OR BETTER FILTERS) MAY BE WORN DURING THE CLEANUP OF SPILLED MATERIALS.

GENERAL HYGIENE:
USE PRODUCT OUTDOORS AWAY FROM COMBUSTIBLE PRODUCTS. FOR CLEANUP OF SPILLED MATERIALS, EMERGENCY SHOWERS AND EYE WASH STATIONS SHOULD BE AVAILABLE. EDUCATE AND TRAIN EMPLOYEES IN THE SAFE USE AND HANDLING OF HAZARDOUS MATERIALS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE (COLOR, PHYSICAL FORM, SHAPE): YELLOW TO 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: 360 DEG. F

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:
COMBUSTIBLE MATERIALS, HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION. MOISTURE.

INCOMPATIBLE MATERIALS:
STRONG ACIDS, STRONG FUELS, AMMONIA SALTS, AND STRONG BASES. STRONG OXIDIZERS; CHLORATE SALTS.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SULFUR OXIDES, AND NITROGEN OXIDES.

-----11. TOXICOLOGY INFORMATION -----

INGREDIENT ACUTE TOXICITY INFORMATION:

INGREDIENT	ORAL LD50	SKIN LD50	LC50
------------	-----------	-----------	------

STRONTIUM NITRATE	RAT: 2750 MG/KG	NO INFORMATION FOUND	NO INFORMATION FOUND
-------------------	-----------------	----------------------	----------------------

SULFUR	RAT: >2000 MG/KG	RAT: >2000 MG/KG	RAT: 79.23 MG/L 4HR
--------	------------------	------------------	---------------------

POTASSIUM NITRATE	RAT: 3750 MG/KG	NO INFORMATION FOUND	NO INFORMATION FOUND
-------------------	-----------------	----------------------	----------------------

PARAFFINIC OIL	RAT: >2000 MG/KG	RAT: >2000 MG/KG	NO INFORMATION FOUND
----------------	------------------	------------------	----------------------

POTASSIUM CHLORATE	RAT: 1870 MG/KG	RABBIT: >2000 MG/KG	NO INFORMATION FOUND
--------------------	-----------------	---------------------	----------------------

WAXY SAWDUST	RAT: >5000 MG/KG	NOT STATED	NOT STATED
--------------	------------------	------------	------------

POLYVINYL CHLORIDE	RAT: >5000 MG/KG	NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT.	NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT.
--------------------	------------------	--	--

SHELLAC	RAT: 1000 MG/KG	NO INFORMATION FOUND	NO INFORMATION FOUND
---------	-----------------	----------------------	----------------------

CHARCOAL	RAT: 15400 MG/KG	RABBIT: 3 G/KG	NO INFORMATION FOUND
----------	------------------	----------------	----------------------

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

SERIOUS EYE DAMAGE / IRRITATION:
CATEGORY 2A - OVER 10% OF INGREDIENTS CLASSIFIED AS A CATEGORY 2A

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:
CATEGORY 3 - RESPIRATORY OVER 10% OF INGREDIENTS CLASSIFIED AS A CATEGORY 3 RESPIRATORY STOT HAZARD

STOT - REPEATED EXPOSURE:
NOT CLASSIFIED (BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET)

ASPIRATION HAZARD:



NOT CLASSIFIED (BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET)

LIKELY ROUTES OF EXPOSURE: SKIN, INGESTION, INHALATION

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:
CONTENTS IRRITATING TO EYES DUE TO CHEMICAL AND PHYSICAL PROPERTIES OF THE MIXTURE. INGESTION OF CONTENTS MAY CAUSE GASTROINTESTINAL IRRITATION WITH NAUSEA, VOMITING AND DIARRHEA. INDIVIDUALS WITH KNOWN ALLERGIES TO SULFIDE DRUGS MAY ALSO HAVE ALLERGIC REACTIONS TO ELEMENTAL SULFUR.

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:

STRONTIUM NITRATE:
ACUTE TOXICITY - FISHES, CARASSIUS AURATUS, LC100, 9,615 MG/L
CHRONIC TOXICITY - FISHES, GASTEROSTEUS ACULEATUS, LC100, 2,912 MG/L

SULFUR:
TOXICITY TO FISH:
LC50 - ONCORHYNCHUS MYKISS (RAINBOW TROUT): > 180 MG/L - 96 H

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES:
EC50 - DAPHNIA MAGNA (WATER FLEA): > 5,000 MG/L - 48 H

POTASSIUM CHLORATE:

FISH:
LC50 ONCORHYNCHUS MYKISS (RAINBOW TROUT): 1750 MG/L - 96 HR
EC50 DAPHNIA MAGNA (WATER FLEA): 1093 MG/L 24 HR

PARAFFINIC OIL:
OIL MIST, MINERAL LEPOMIS MACROCHIRUS (LC50) 96 HOUR(S): > 100 MG/L
ONCORHYNCHUS MYKISS (LC50) 96 HOUR(S): > 100 MG/L

POTASSIUM NITRATE:

FISH:
GUPPY (POECILIA RETICULATA) LC50 180 MG/L (96 H);
ZOOPLANKTON: DAPHNIA MAGNA LC50 490 MG/L - 48HR

PERSISTENCE / DEGRADABILITY:

POTASSIUM NITRATE:
SOLUBLE IN WATER PERSISTENCE IS UNLIKELY BASED ON INFORMATION AVAILABLE.

BIOACCUMULATION / ACCUMULATION: NO INFORMATION FOUND

MOBILITY IN ENVIRONMENTAL MEDIA:
STRONTIUM NITRATE:
WATER:
CONSIDERABLE SOLUBILITY AND MOBILITY; SOIL/SEDIMENTS NON-SIGNIFICANT ADSORPTION

POTASSIUM NITRATE:
WILL LIKELY BE MOBILE IN THE ENVIRONMENT DUE TO ITS WATER SOLUBILITY.

OTHER ADVERSE EFFECTS: NO INFORMATION FOUND

-----13. DISPOSAL CONSIDERATIONS -----

DISPOSAL METHODS:
FLARES SHOULD BE ALLOWED TO BURN TO COMPLETION. PARTIALLY BURNED OR UNBURNED FLARES, SPILLED CONTENTS, AND ASH FROM BURNED FLARES SHOULD BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. CONSULT FACTORY FOR ANY ADDITIONAL DISPOSAL CONCERNS.

-----14. TRANSPORTATION INFORMATION -----

DESCRIPTION ID NUMBER SHIPPING NAME HAZARD CLASS PACKING GROUP

UNITED STATES:

BULK FLARES NA1325 FUSEE 4.1 II

RETAIL PACKAGED UN3178 ORM-D/LIMITED NOT APPLICABLE NOT APPLICABLE
FLARES QUANTITY

INTERNATIONAL / AIR:

BULK FLARES UN0373 SIGNAL DEVICES, 1.4S II
HAND

DESCRIPTION EX NUMBER REPORTABLE QUANTITIES SHIPPING METHOD

UNITED STATES:

BULK FLARES NOT APPLICABLE NONE GROUND ONLY

RETAIL PACKAGED NOT APPLICABLE NONE GROUND ONLY
FLARES

INTERNATIONAL / AIR:

BULK FLARES EX-1992090001 NONE AIR / GROUND

MARINE POLLUTANT: NO

SPECIAL PRECAUTIONS FOR USE: NO INFORMATION AVAILABLE

-----15. REGULATORY INFORMATION -----

US REGULATIONS TSCA CERCLA CWA CAA SARA 313 SARA 302

STRONTIUM NITRATE YES NO NO NO NO NO

SULFUR YES NO NO NO NO NO

POTASSIUM NITRATE YES NO NO NO YES NO

PARAFFINIC OIL YES NO NO NO NO NO

POTASSIUM CHLORATE YES NO NO NO NO NO

WAXY SAWDUST YES NO NO NO NO NO

POLYVINYL CHLORIDE YES NO NO NO NO NO

SHELLAC MIXTURE YES NO NO NO YES NO

CHARCOAL YES NO NO NO NO NO

US REGULATIONS ACUTE CHRONIC FIRE REACTIVITY PRESSURE

STRONTIUM NITRATE YES NO NO YES NO

SULFUR YES NO YES NO NO

POTASSIUM NITRATE NO NO NO YES NO

PARAFFINIC OIL NO NO NO NO NO

POTASSIUM CHLORATE YES NO NO YES NO

WAXY SAWDUST NO NO NO NO NO

POLYVINYL CHLORIDE YES NO NO NO NO

SHELLAC MIXTURE UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN

CHARCOAL NO NO NO NO NO

US STATES PROP 65 NJ PA CANADA WHMIS DSL EUROPE W GK

STRONTIUM NITRATE NO 1743 NO C OXIDIZING YES 2
MATERIALS

D1B TOXIC
MATERIALS
D2B TOXIC
MATERIALS

SULFUR NO 1757 YES B4 FLAMMABLE YES 1/NWG
SOLID
D2B TOXIC
MATERIALS

POTASSIUM NITRATE NO 1574 YES C OXIDIZING YES 1
MATERIALS

PARAFFINIC OIL NO 1437 NO NO RESULTS YES NOT
LISTED

POTASSIUM CHLORATE YES 1560 YES C OXIDIZING YES 2
MATERIALS
D1B TOXIC
MATERIALS

WAXY SAWDUST YES NO NO NO RESULTS YES NOT
LISTED

POLYVINYL CHLORIDE NO 3622 NO NO RESULTS YES NOT
LISTED

SHELLAC MIXTURE NO NO NO NO RESULTS UNKNOWN NOT
LISTED

CHARCOAL YES YES YES D2A VERY YES NWG
TOXIC
MATERIALS
D2B TOXIC
MATERIALS

-----16. OTHER INFORMATION -----

REVISION INFORMATION: MAY 2015

NFPA RATING:
HEALTH 2
FLAMMABILITY 1
REACTIVITY 1

HMIS RATING:
HEALTH 2
FLAMMABILITY 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

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

LEGAL STATEMENT:

THIS INFORMATION IS ACCURATE TO THE BEST KNOWLEDGE ORION SAFETY PRODUCTS. ORION SAFETY PRODUCTS MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION 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.

NO PC FLARE



SDSG1428

ITEM: 45MG26 Nonspike Flares, 17-1/2 in. L, 30 min, PK36

DELIVERY: 6613627925

HU NUMBER: U803117196

SAFETY DATA SHEET (SDS)

This SDS should be attached or kept with the respective product with which it is associated.

SDS - G1428

Associated Items
45MG26

ORION(R®)

THE BRIGHTEST NAME IN SAFETY

SAFETY DATA SHEET

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

RED EMERGENCY FLARE - NO PERCHLORATE (NPC) FORMULATION

IDENTIFICATION: THE NPC FLARE WILL HAVE THE FOLLOWING SYMBOL ON IT.

IMPROVED ECO-FRIENDLY FORMULA

SYNONYMS: EMERGENCY ROAD FLARE, RAILWAY FLARE

NSN#: 1370-01-009-2593

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

GHS LABEL ELEMENTS:

HAZARD STATEMENTS:
H204: FIRE OR PROJECTION HAZARD
H315: CAUSES SKIN IRRITATION
H319: CAUSES SERIOUS EYE IRRITATION
H335: MAY CAUSE RESPIRATORY IRRITATIONPICTOGRAMS:
EXPLODING BOMB
EXCLAMATION MARK

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.

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 COMFORTABLE POSITION FOR BREATHING.IF EXPERIENCING RESPIRATORY SYMPTOMS:
CALL 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.

P332/313: 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

-----3. COMPOSITION / INFORMATION ON INGREDIENTS -----

COMPONENT	CAS #	EINCS #	PERCENTAGE
STRONTIUM NITRATE	10042-76-9	233-131-6	<75%
SULFUR	7704-34-9	231-722-6	<25%
POTASSIUM NITRATE	7757-79-1	231-818-8	<25%
PARAFFINIC OIL	64742-54-7	232-384-2	<10%
POTASSIUM CHLORATE	3811-04-9	231-100-4	<5%
SAWDUST (CELLULOSE)	9004-34-6	232-674-9	<5%
POLYVINYL CHLORIDE	9002-86-2	200-831-0	<5%
CHARCOAL	1333-86-4	231-153-3	<1%

NOTE:

DUE TO CONFIDENTIAL BUSINESS INFORMATION, 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 11INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:
BURNING FLARE CAN CAUSE SEVERE BURNS IF IN CONTACT WITH BODY. FOR BURNS TO SKIN, COOL WITH WATER AND BANDAGE APPROPRIATELY. SEEK MEDICAL ATTENTION. IF EYE IS BURNED, COVER EYE AND GET MEDICAL AID IMMEDIATELY.

-----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 UNBURNED NEARBY PRODUCT WITH WATER. COMBAT FIRE FROM A SHELTERED POSITION. USE COPIOUS AMOUNTS OF WATER TO EXTINGUISH FIRE COMPRISED OF FLARES. FLARES CONTAIN OXIDIZERS AND WILL CONTINUE TO BURN UNLESS A SIGNIFICANT AMOUNT OF WATER IS USED. DO NOT BREATHE SMOKE.

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. DO NOT ABSORB IN SAWDUST OR OTHER COMBUSTIBLE ABSORBENTS. PICK UP SPILL FOR RECOVERY OR DISPOSAL AND PLACE IN AN APPROVED CONTAINER. WASH AWAY REMAINDER WITH PLENTY OF WATER. COLLECT WASH WATER FOR APPROVED DISPOSAL.

-----7. HANDLING AND STORAGE -----

PRECAUTIONS FOR SAFE HANDLING:
HOLD AND POINT FLARE AWAY FROM BODY WHEN IGNITING. EXERCISE CAUTION WHEN USING THE PRODUCT SINCE MOLTEN FLECKS MAY BE EMITTED. PRODUCES HOT FLAME. BURNING FLARE CAN CAUSE SEVERE BURNS IF IN CONTACT WITH BODY. AVOID CONTACT WITH CLOTHING AND OTHER COMBUSTIBLE MATERIALS. WEAR EYE PROTECTION DURING USE. FOLLOW INSTRUCTIONS ON PACKAGE. USE OUTDOORS ONLY! DO NOT IGNITE OR BURN PRODUCT INSIDE A VEHICLE OR BUILDING. AVOID INHALATION OF SMOKE. DO NOT DISMANTLE. DO NOT ALLOW CONTENTS TO TOUCH EYES, SKIN OR CLOTHING. DO NOT INGEST CONTENTS AS THEY MAY BE HARMFUL IF SWALLOWED. WASH THOROUGHLY AFTER HANDLING. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. AVOID CONTACT WITH HEAT, SPARKS, AND FLAME.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:
STORE IN A DRY PLACE AWAY FROM DIRECT SUNLIGHT, HEAT AND INCOMPATIBLE MATERIALS. SEE SECTION 10. STORE AWAY FROM FOOD AND BEVERAGES. 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, WAREHOUSE, OR ANY OTHER BUILDING. PLASTIC BAGS ARE PROVIDED FOR MOISTURE PROTECTION. KEEP PARTIALLY USED BAGS SEALED AT ALL TIMES.

-----8. EXPOSURE CONTROLS / PERSONAL PROTECTION -----

CONTROL PARAMETERS:

EXPOSURE LIMITS OSHA PEL ACGIH TLV

STRONTIUM NITRATE NOT ESTABLISHED NOT ESTABLISHED

SULFUR NOT ESTABLISHED NOT ESTABLISHED

POTASSIUM NITRATE NUISANCE DUST, 15 MG/M3 NUISANCE DUST, 15 MG/M3

PARAFFINIC OIL 5 MG/M3 5 MG/M3 TWA

POTASSIUM CHLORATE NO AIRBORNE EXPOSURE LIMITS ESTABLISHED NO AIRBORNE EXPOSURE LIMITS ESTABLISHED

SAWDUST (CELLULOSE) 5 MG/M3 10 MG/M3

POLYVINYL CHLORIDE NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT. NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT.

CHARCOAL NUISANCE DUST, 15 MG/M3 NUISANCE DUST, 15 MG/M3

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

SOLUBILITY: NO DATA 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: NO DATA 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:
COMBUSTIBLE MATERIALS, HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION. MOISTURE.

INCOMPATIBLE MATERIALS:
STRONG ACIDS, STRONG FUELS, AMMONIA SALTS AND STRONG BASES. STRONG OXIDIZERS; CHLORATE SALTS.

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: 2750 MG/KG NO INFORMATION FOUND NO INFORMATION FOUND

SULFUR RAT: >2000 MG/KG RAT: >2000 MG/KG RAT: 79.23 MG/L 4HR

POTASSIUM NITRATE RAT: 3750 MG/KG NO INFORMATION FOUND NO INFORMATION FOUND

PARAFFINIC OIL RAT: >2000 MG/KG RAT: >2000 MG/KG NO INFORMATION FOUND

POTASSIUM CHLORATE RAT: 1870 MG/KG RABBIT: >2000 MG/KG NO INFORMATION FOUND

SAWDUST (CELLULOSE) RAT: >5000 MG/KG RABBIT: >2000 MG/KG RAT 758 MG/M3

POLYVINYL CHLORIDE RAT: >5000 MG/KG NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT. NO KNOWN HAZARDOUS COMPONENTS ABOVE REGULATORY THRESHOLDS IN THIS PRODUCT.

CHARCOAL RAT: >15400 MG/KG RABBIT: 3 G/KG NO INFORMATION FOUND

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:
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:
CATEGORY 3 - RESPIRATORY-OVER 10% OF INGREDIENTS CLASSIFIED AS A CATEGORY 3 RESPIRATORY STOT HAZARD

STOT REPEATED EXPOSURE:
NOT CLASSIFIED (BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET)

ASPIRATION HAZARD:
NOT CLASSIFIED (BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET)

LIKELY ROUTES OF EXPOSURE: SKIN, INGESTION, INHALATION

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:
CONTENTS IRRITATING TO EYES DUE TO CHEMICAL AND PHYSICAL PROPERTIES OF THE MIXTURE. INGESTION OF CONTENTS MAY CAUSE GASTROINTESTINAL IRRITATION WITH NAUSEA, VOMITING AND DIARRHEA. INDIVIDUALS WITH KNOWN ALLERGIES TO SULFIDE DRUGS MAY ALSO HAVE ALLERGIC REACTIONS TO ELEMENTAL SULFUR.

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:

STRONTIUM NITRATE:
ACUTE TOXICITY - FISHES, CARASSIUS AURATUS, LC100, 9,615 MG/L;
CHRONIC TOXICITY - FISHES, GASTEROSTEUS ACULEATUS, LC100, 2,912 MG/L

SULFUR:
TOXICITY TO FISH LC50 - ONCORHYNCHUS MYKISS (RAINBOW TROUT):
>180 MG/L - 96 H

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES:
EC50 - DAPHNIA MAGNA (WATER FLEA): >5,000 MG/L - 48 H

POTASSIUM CHLORATE:
FISH:
LC50 ONCORHYNCHUS MYKISS (RAINBOW TROUT) 1750 MG/L 96 HR, EC50 DAPHNIA MAGNA (WATER FLEA) 1093 MG/L 24 HR

PARAFFINIC OIL:
OIL MIST, MINERAL LEPOMIS MACROCHIRUS (LC50) 96 HOUR(S):
>100 MG/L ONCORHYNCHUS MYKISS (LC50) 96 HOUR(S) >100 MG/L

POTASSIUM NITRATE:
FISH: GUPPY (POECILIA RETICULATA) LC50 180 MG/L (96 H)
ZOOPLANKTON: DAPHNIA MAGNA LC50 490MG/L 48HR

PERSISTENCE / DEGRADABILITY:

POTASSIUM NITRATE:
SOLUBLE IN WATER PERSISTENCE IS UNLIKELY BASED ON INFORMATION AVAILABLE.

BIOACCUMULATION / ACCUMULATION: NO INFORMATION FOUND

MOBILITY IN ENVIRONMENTAL MEDIA:

STRONTIUM NITRATE:
WATER:
CONSIDERABLE SOLUBILITY AND MOBILITY;
SOIL/SEDIMENTS NON-SIGNIFICANT ADSORPTION

POTASSIUM NITRATE:
WILL LIKELY BE MOBILE IN THE ENVIRONMENT DUE TO ITS WATER SOLUBILITY.

OTHER ADVERSE EFFECTS: NO INFORMATION FOUND

-----13. DISPOSAL CONSIDERATIONS (FOR SPILLS AND LEAKAGE)-----

DISPOSAL METHODS:
FLARES SHOULD BE ALLOWED TO BURN TO COMPLETION. PARTIALLY BURNED OR UNBURNED FLARES, SPILLED CONTENTS, AND ASH FROM BURNED FLARES SHOULD BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. CONSULT FACTORY FOR ANY ADDITIONAL DISPOSAL CONCERNS.

-----14. TRANSPORTATION INFORMATION-----

PACKAGING ID PROPER HAZARD P G EX NUMBER REPORT- COMMENTS
DESCRIPTION NUMBER SHIPPING CLASS ABLE
NAME QUANTI-
TIES

COMPETENT AUTHORITY APPROVAL / CLASSIFICATION REFERENCE #EX1992090001:

INNER UN0373 SIGNAL 1.4S N/A EX1992090001 NONE ALLOWED
PACKAGING DEVICES, BY
(BAG) HAND PASSENGER
AIRCRAFT,

GROUND,
VESSEL

ALLOWED FOR DOMESTIC SHIPMENTS / NOTED ON ORIGINAL CLASSIFICATION SHOWN ABOVE:

NO INNER NA1325 FUSEE 4.1 II N/A NONE ALLOWED
PACKAGE FOR
REQUIRED DOMESTIC
SHIPMENTS
ONLY

ALLOWED WHEN PACKAGED AS SPECIFIED ON APPROVAL / REFERENCE #EX2002110114):

*SPECIFIC **UN FLAMMABLE 4.1 II EX2002110114 NONE *UP TO 4
ON APPROVAL 3178 SOLID, FUSEES
INORGA- PER INNER
NIC, PACKAGE,
N.O.S. UP TO 144
FUSEES
PER OUTER
PACKAGE.

**ACCORDING TO 49CFR, EXCEPTIONS FOR CLASS 4, LIMITED QUANTITIES OF FLARES PROPERLY PACKAGED AND CLASSED AS UN3178, FLAMMABLE SOLID, INORGANIC, N.O.S. ARE EXCEPTED FROM SEVERAL REQUIREMENTS UNLESS OFFERED FOR TRANSPORT BY AIR OR UNTIL DEC. 31ST 2020, THEY -D AND OFFERED FOR TRANSPORT IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THAT SUBCHAPTER.

MARINE POLLUTANT: NO

SPECIAL PRECAUTIONS FOR USER: NO INFORMATION AVAILABLE.

-----15. REGULATORY INFORMATION-----

US REGULATIONS TSCA CERCLA CWA CAA SARA 313 SARA 302 ACUTE

STRONTIUM NITRATE YES NO NO NO NO NO YES

SULFUR YES NO NO NO NO NO YES

POTASSIUM NITRATE YES NO NO NO YES NO NO

PARAFFINIC OIL YES NO NO NO NO NO NO

POTASSIUM CHLORATE YES NO NO NO NO NO YES

SAWDUST (CELLULOSE) YES NO NO NO NO NO NO

POLYVINYL CHLORIDE YES NO NO NO NO NO YES

CHARCOAL YES NO NO NO NO NO NO

US REGULATIONS CHRONIC FIRE REACTIVITY PRESSURE

STRONTIUM NITRATE NO NO YES NO

SULFUR NO YES NO NO

POTASSIUM NITRATE NO NO YES NO

PARAFFINIC OIL NO NO NO NO

POTASSIUM CHLORATE NO NO YES NO

SAWDUST (CELLULOSE) NO NO NO NO

POLYVINYL CHLORIDE NO NO NO NO

CHARCOAL NO NO NO NO

US STATES PROP 65 NJ PA CANADA WHMIS DLS EUROPE WGK

STRONTIUM NITRATE NO 1743 NO C OXIDIZING YES 2
MATERIALS

D1B TOXIC
MATERIALS

D2B TOXIC
MATERIALS

SULFUR NO 1757 YES B4 FLAMMABLE YES 1 / NWG
SOLID

D2B TOXIC
MATERIALS

POTASSIUM NITRATE NO 1574 YES C OXIDIZING YES 1
MATERIALS

PARAFFINIC OIL NO 1437 NO NO RESULTS YES NOT
LISTED

POTASSIUM CHLORATE YES 1560 YES C OXIDIZING YES 2
MATERIALS

D1B TOXIC
MATERIALS

SAWDUST (CELLULOSE) YES NO NO NO RESULTS YES NOT
LISTED

POLYVINYL CHLORIDE NO 3622 NO NO RESULTS YES NOT
LISTED



CHARCOAL YES YES YES D2A VERY YES NWG
TOXIC
MATERIALS
D2B TOXIC
MATERIALS

-----16. OTHER INFORMATION -----

REVISION INFORMATION: MARCH 2019

NFPA RATING:
HEALTH 2
FLAMMABILITY 1
REACTIVITY 1

HMIS RATING:
HEALTH 2
FLAMMABILITY 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

NO PC FLARE MAR 2020

