

# STANDARD FUSEE CORP./ORION SAFETY PRODUCTS

## MATERIAL SAFETY DATA

- RAILWAY & HIGHWAY FUSEES

- **ORION MARINE SIGNAL PRODUCTS**

EMERGENCY CONTACT:  
CHEMTREC 1-800-424-9300

### SECTION I - IDENTIFICATION

CHEMICAL NAMES & SYNONYMS: <b>Hand-Held Orange Smoke Distress Signal</b>		
CHEMICAL FAMILY: PYROTECHNIC DEVICE	FORMULA: MIXTURE	TRADE NAME: <b>Orange Smoke</b>
DESCRIPTION: CARDBOARD TUBE CONTAINING ORANGE SOLID MIXTURE.		CAS NO.: NONE ASSIGNED/MIXTURE

### SECTION II - HAZARDOUS INGREDIENTS

BASIC MATERIAL	OSHA P.E.L.	LD 50	LC 50	SIGNIFICANT EFFECTS
SOLVENT YELLOW #14 DYE C.A.S.# 842-07-9	NONE EST.	NO DATA	NO DATA	IRRITANT TO SKIN, EYES AND MUCOUS MEMBRANES. 2mg/m <sup>3</sup> DUST
LACTOSE C.A.S.# 64044-51-5	NONE EST.	NO DATA	NO DATA	NONE KNOWN.
POTASSIUM CHLORATE C.A.S.# 3811-04-09	NONE EST.	NO DATA	NO DATA	MAY CAUSE EYE AND MUCOUS MEMBRANE IRRITATION.
SOLVENT ORANGE 7 DYE C.A.S.# 3118-97-6	NONE EST.	NO DATA	NO DATA	MAY CAUSE EYE AND MUCOUS MEMBRANE IRRITATION

### SECTION III - NORMAL HANDLING PROCEDURES

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: **KEEP ITEMS OUT OF THE REACH OF CHILDREN!!**

CONTENTS MAY BE HARMFUL IF SWALLOWED. IF TUBE IS BROKEN, DO NOT GET CONTENTS IN EYES, ON SKIN OR ON CLOTHING. UPON CONTACT WITH SKIN OR EYES, WASH WITH WATER. AVOID BREATHING DUST. STORE IN A COOL, DRY, WELL-VENTILATED PLACE AWAY FROM ALL SOURCES OF IGNITION. EXERCISE CAUTION WHEN USING THIS PRODUCT SINCE MOLTEN FLECKS MAY BE EMITTED. DO NOT USE PRODUCT NEAR ANY FLAMMABLE OR COMBUSTIBLE MATERIALS. AVOID CONTACT WITH STRONG OXIDIZERS. AVOID OPEN FLAMES AND TEMPERATURES >167°F. FOR OUTDOOR USE ONLY.

PROTECTIVE EQUIPMENT	VENTILATION REQUIREMENTS
FOLLOW DIRECTIONS ON PACKAGE. ALWAYS POINT FUSEE AWAY FROM FACE AND BODY WHILE IGNITING AND AFTERWARDS.	THIS PRODUCT SHOULD ONLY BE USED OUTDOORS. AVOID BREATHING SMOKE WHEN POSSIBLE.

### SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT/METHOD: <b>N/A</b>	OSHA CLASSIFICATION: 1.4S EXPLOSIVE	FLAMMABLE EXPLOSIVE LIMITS: UPPER: NONE ESTAB. LOWER: NONE ESTAB.
CONTENTS: >167°F (OVEN)		
EXTINGUISHING MEDIA: USE WATER DELUGE/FLOODING METHODS;		
<b>SUFFOCATION TECHNIQUES WILL NOT BE EFFECTIVE:</b> NO THREAT OF MASS EXPLOSION SUSPECTED.		
<b>SPECIAL FIRE HAZARD &amp; FIRE FIGHTING PROCEDURES:</b> USE NIOSH/MSHA APPROVED POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS WHEN ANY MATERIAL IS INVOLVED IN FIRE.		

### SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NONE ESTABLISHED FOR THE MIXTURE.
SYMPTOMS OF OVER EXPOSURE: TUBE CONTENTS ARE CORROSIVE TO THE EYES AND IRRITATING TO THE RESPIRATORY TRACT AND SKIN.
SKIN: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES, CALL A PHYSICIAN IF IRRITATION OCCURS.
EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES, CALL A PHYSICIAN.
INGESTION: CALL A PHYSICIAN IMMEDIATELY
INHALATION: IMMEDIATELY REMOVE VICTIM TO FRESH AIR. CALL A PHYSICIAN.

**CHEMICAL NAME: ORANGE SMOKE****SECTION VI - TOXICOLOGY (PRODUCT)**

ALL CHEMICAL IS CONTAINED IN CARDBOARD TUBE - NONE IS EXPOSED

ACUTE ORAL LD 50: NONE ESTABLISHED	CARCINOGENICITY: AN EXPERIMENTAL CARCINOGEN & TUMORIGEN (DYE COMPONENT)
ACUTE DERMAL LD 50: NONE ESTABLISHED	MUTAGENICITY: POSSIBLE HAZARD (DYE COMPONENT)
ACUTE INHALATION LD 50: NOT ESTABLISHED	EYE IRRITATION: YES - TUBE CONTENTS
PRINCIPLE ROUTES OF ABSORPTION: INHALATION; DERMAL CONTENT	PRIMARY SKIN EFFECT: MAY CAUSE IRRITATION
EFFECTS OF ACUTE EXPOSURE: TUBE CONTENTS ARE CORROSIVE TO EYES AND IRRITATING TO RESPIRATORY TRACT AND SKIN. INHALATION OF COMBUSTION PRODUCTS WILL IRRITATE EYES, LUNGS, AND MUCOUS MEMBRANES. HOLD SIGNAL DOWN WIND WHEN BURNING. AVOID BREATHING SMOKE, WHENEVER POSSIBLE.	
EFFECTS OF CHRONIC EXPOSURE: NO DEFINITIVE DATA; NONE EXPECTED WITH NORMAL USE.	

**SECTION VII - SPILL AND LEAKAGE PROCEDURES (Control Procedures)**

**ACTION FOR MATERIAL RELEASE OR SPILL:** For large amounts, remove all sources of ignition. If tubes are broken, wear NIOSH/MSHA approved dust respirator, goggles, impervious coveralls, gloves and boots. Follow OSHA regulations for respirator use (See 29 C.F.R. 1910.134). Shovel or sweep up and place in an approved DOT container using non-sparking utensils. Minimize contamination with organic material. Do not return material to original container. Place swept material into fresh container, isolate and DO NOT SEAL. Wash all contaminated clothing before reuse. In the event of a large spill, call the emergency number listed below. If spill area is washed with water, collect wash water for approved disposal. Keep from entering water sources and sewers. **TRANSPORTATION EMERGENCY, CALL CHEMTREC 1-800-424-9300**

**WASTE DISPOSAL METHOD:** Dispose of contaminated product 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. Open burning is the preferred method of disposal for pyrotechnic materials but must be done in compliance with federal, state and local regulations.

**SECTION VIII - SHIPPING DATA**

**D.O.T. CLASS (DOMESTIC):** SIGNAL DEVICES, HAND, 1.4S, UN0373, PGII, LABEL REQ: 1.4S

**INTERNATIONAL CLASS & DOMESTIC AIR:** SIGNAL DEVICES, HAND, 1.4S, UN0373, PG II LABEL REQ: 1.4S Passenger aircraft - 25kg, Cargo aircraft - 100kg.

**SECTION IX - REACTIVITY DATA**

STABLE <input checked="" type="checkbox"/> UNSTABLE <input type="checkbox"/> @ _____°C _____°F	HAZARDOUS POLYMERIZATION	MAY OCCUR
		WILL NOT OCCUR <input checked="" type="checkbox"/>

**CONDITIONS TO AVOID:** DO NOT EXPOSE TO TEMPERATURES ABOVE 160°F, IGNITION SOURCES OF ANY KIND

**INCOMPATIBILITY (MATERIAL TO AVOID):** STRONG OXIDIZERS; STRONG ACIDS; OXIDIZING OR REDUCING AGENTS OR LIQUID ACIDS OF ANY KIND.

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

**SECTION X - PHYSICAL DATA**

MELTING POINT: NO DATA	VAPOR PRESSURE: NO DATA	VOLATILES: NO DATA
BOILING POINT: NO DATA	SOLUBILITY IN WATER: SLIGHT	EVAPORATION RATE: NO DATA
SPECIFIC GRAVITY (H <sub>2</sub> O = 1): NO DATA	pH NO DATA	VAPOR DENSITY (AIR = 1): NO DATA

INFORMATION FURNISHED BY:

ORION SAFETY PRODUCTS

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