

ORION SAFETY PRODUCTS

MATERIAL SAFETY DATA

EMERGENCY

CONTACT:

- RAILWAY & HIGHWAY FUSEES
-ORION MARINE SIGNAL PRODUCTS

1-800-424-9300
CHEMTREC

SECTION I - IDENTIFICATION

CHEMICAL NAMES & SYNONYMS: **Hand-Held Orange Smoke Distress Signal**

CHEMICAL FAMILY: PYROTECHNIC DEVICE	FORMULA: MIXTURE	TRADE NAME: ORANGE SMOKE
DESCRIPTION: Cardboard Tube Containing orange solid pyrotechnic 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 29%	NONE EST.	NO DATA	NO DATA	IRRITANT TO SKIN, EYES AND MUCOUS MEMBRANES. 2mg/m ³ DUST
Lactose C.A.S. #64044-51-5 than 30%	NONE EST.	NO DATA	NO DATA	NONE KNOWN
Potassium Chlorate C.A.S #3811-04-09 22%	NONE EST.	NO DATA	NO DATA	MAY CAUSE EYE AND MUCOUS MEMBRANE IRRITATION.
Solvent Orange 7 C.A.S. #3118-97-6 19%	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.

PROTECTIVE EQUIPMENT	VENTILATION REQUIREMENTS
FOLLOW DIRECTIONS ON PACKAGE. ALWAYS POINT FLARE AWAY FROM FACE AND BODY WHILE IGNITING AND AFTERWARDS.	THIS PRODUCT IS INTENDED FOR OUTDOOR USE ONLY. AVOID BREATHING SMOKE WHEN POSSIBLE.

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT/METHOD: CONTENTS: greater than 167°F	OSHA CLASSIFICATION: EXPLOSIVE	FLAMMABLE EXPLOSIVE LIMITS: UPPER: NONE ESTAB. LOWER: NONE ESTAB.
--	-----------------------------------	--

EXTINGUISHING MEDIA: USE WATER DELUGE/FLOODING METHODS; **SUFFOCATION TECHNIQUES WILL NOT BE EFFECTIVE:** NO THREAT OF MASS EXPLOSION.

SPECIAL FIRE HAZARD & FIRE FIGHTING PROCEDURES: 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: IF CONTENTS ARE INGESTED: INDUCE VOMITING AND CALL A PHYSICIAN.
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: NOT ESTABLISHED	CARCINOGENICITY: AN EXPERIMENTAL CARCINOGEN & TUMORIGEN (DYE)
	MUTAGENICITY: POSSIBLE HAZARD (DYE)

ACUTE DERMAL LD 50:	NOT ESTABLISHED	EYE IRRITATION:	YES-TUBE CONTENTS
ACUTE INHALATION LD 50:	NOT ESTABLISHED	PRIMARY SKIN EFFECT:	MAY CAUSE DERMITIES
PRINCIPLE ROUTES OF ABSORPTION: INHALATION; DERMAL CONTENT			
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: IN LARGE QUANTITY, REMOVE ALL SOURCES OF IGNITION. IF TUBE IS BROKEN, WEAR NIOSH/MSHA APPROVED DUST RESPIRATOR. FOLLOW O.S.H.A. REGULATIONS FOR RESPIRATOR USE, (SEE 29CFR 1910.134). WEAR GOGGLES, IMPERVIOUS COVERALLS, GLOVES AND BOOTS. CLEAN UP IN A MANNER TO MINIMIZE CONTAMINATION WITH ORGANIC MATERIAL. DO NOT RETURN MATERIAL TO ORIGINAL CONTAINER. PLACE IN A FRESH CONTAINER AND ISOLATE. DO NOT SEAL THE CONTAINER. IN THE EVENT OF A LARGE SPILL, CALL THE EMERGENCY TELEPHONE NUMBER.

TRANSPORTATION EMERGENCY, CONTACT CHEMTREC 800-424-9300

WASTE DISPOSAL METHOD: 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.

SECTION VIII - SHIPPING DATA

D.O.T. CLASS (DOMESTIC): SIGNALS DEVICE, HAND, 1.4S 0373 PG:II LABEL REQ: EXPLOSIVE 1.4S

INTERNATIONAL CLASS & DOMESTIC AIR: SIGNAL, DEVICE SMOKE, 1.4S, UN0373, PG:II LABEL REQ: 1.4S CARGO AIR ONLY 75kg.

SECTION IX - REACTIVITY DATA

STABLE	X	UNSTABLE	@ _____°C _____°F	HAZARDOUS POLYMERIZATION	MAY OCCUR
					WILL NOT OCCUR X

CONDITIONS TO AVOID: EXTREME HEAT, SPARKS AND OPEN FLAME.

INCOMPATIBILITY (MATERIAL TO AVOID): LIQUID ACIDS; STRONG OXIDIZING OR REDUCING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: BURNING SMOKE MAY GENERATE SOME CARBON MONOXIDE AND NITROGEN OXIDES.

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 ₂ O = 1): NO DATA	pH NO DATA	VAPOR DENSITY (AIR = 1): NO DATA

INFORMATION FURNISHED BY:

DELORES W. BROWN

DATE: March 2003

ORION SAFETY PRODUCTS

P.O. BOX 540, 2975 STATE ROAD, BRISTOL, PA 19007 Tel: 1-800-788-3008
PHONE: 800-788-3008 FAX: 215-788-7244