

SECTION I - IDENTIFICATION

PRODUCT NAME & SYNONYMS: CHIMFEX		
CHEMICAL FAMILY: not applicable	FORMULA: Mixture	TRADE NAME: Chimfex
DESCRIPTION: Cardboard tube containing gray / yellow solid mixture		CAS NO: Not Applicable

SECTION II - NORMAL HANDLING PROCEDURES

<p>PRECAUTIONS TO BE TAKEN IN HANDLING, USAGE, AND STORAGE: <i>KEEP OUT OF REACH OF CHILDREN</i> 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 store product near any flammable or combustible materials. Avoid contact with strong oxidizers. Avoid open flames and temperatures >167°F. Ignite product over fireplace hearth or fire-proof stove board. Product is designed for emergency use, do not attempt to ignite or burn this product inside a building or vehicle for demonstration or recreational use. Follow directions on package. Always point Chimfex away from face and body while igniting and afterward. Fumes harmful if inhaled.</p>	
PROTECTIVE EQUIPMENT	VENTILATION REQUIREMENTS
<p>EYES: Goggles when handling broken containers. GLOVES: None required. OTHER: None required.</p>	<p>Burning unit produces copious amounts of white smoke containing zinc oxide fumes. Avoid contact with smoke. When used in a confined or restricted space area use NIOSH/MSHA approved SCBA.</p>

SECTION III - HAZARDOUS INGREDIENTS

BASIC MATERIALS	OSHA PEL	LD 50	LC 50	SIGNIFICANT EFFECTS
Potassium Nitrate CAS 7757-79-1	None est.	No data	No data	Irritant to skin, eyes & respiratory tract. Ingestion may cause gastroenteritis and abdominal pain.
Strontium Nitrate CAS#10042-76-9	None est.	2750 g/K (rat)	No data	Irritant to skin & mucous membranes. Severe irritation and possibly mild chemical burns to eyes.
Sulfur CAS # 7704349	None est.	No data	No data	Irritant to eye. May cause mucous membrane irritation. Individuals with known allergies to sulfide drugs may also have allergic reactions to elemental sulfur.
Zinc powder CAS 7440-66-6	None est.	No data	No data	Irritant to skin and eyes. May cause respiratory irritation

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

IGNITION POINT OF CONTENTS: >167°F	OSHA CLASSIFICATION: Flammable solid, inorganic, nos	FLAMMABLE EXPLOSIVE LIMITS	LOWER: Not Estab.	UPPER: Not Estab.
<p>EXTINGUISHING MEDIA: Use water deluge/flooding methods Suffocation techniques will not be effective. No threat of mass explosion.</p> <p>SPECIAL FIRE HAZARD & FIRE FIGHTING PROCEDURES: Devices will burn readily in a fire situation generating zinc oxide fumes. Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when chimfex devices are involved in a fire.</p>				

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE:	None established.
<p>SYMPTOMS OF OVER EXPOSURE: Tube contents are irritating to respiratory tract and skin. Contents could cause severe irritation, possible mild chemical burns, to the eyes. Inhalation of combustion products will irritate eyes, lungs and mucus membranes. Avoid breathing smoke whenever possible.</p>	
SKIN:	If exposed to contents, flush thoroughly with water. Call physician if irritation occurs.
EYES:	If exposed to contents, flush with water for 15 minutes, call a physician.
INGESTION:	If contents are ingested, get medical attention immediately
<p>INHALATION: If contents are inhaled, move victim to fresh air. Call a physician. Inhalation of zinc oxide fumes may cause an influenza-like illness termed metal fume fever. Symptoms, which appear several hours following exposure, include chills, lassitude, malaise, frontal headache, low- back pain muscle cramps, and vomiting. Possible irritation of nasal passages, coughing and fever.</p>	

SECTION VI - TOXICOLOGY (Contents of Chimfex)

ACUTE ORAL LD 50: None established	CARCINOGENICITY: Not known to be carcinogenic
ACUTE DERMAL LD 50: None established.	MUTAGENICITY: Not known to be mutagenic
ACUTE INHALATION LC 50: None established	
PRINCIPAL ROUTES OF ABSORPTION: Inhalation, dermal contact	
EFFECTS OF ACUTE EXPOSURE: Tube contents are irritating to respiratory tract and skin. Contents could cause severe irritation, possible mild chemical burns, to the eyes. Inhalation of combustion products will irritate eyes, lungs and mucus membranes. Avoid breathing smoke whenever possible.	
EFFECTS OF CHRONIC EXPOSURE: None known or reported	

SECTION VII - SPILL AND LEAKAGE PROCEDURES (Control Procedures)

ACTION FOR MATERIAL RELEASE OR SPILL: 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). Avoid dust formation of spilled contents by using natural brooms / brushes in slow sweeping motion. Remove all sources of ignition - use non sparking tools for cleanup. Clean up in a manner to minimize contamination with organic material. Do not return material to original container. Place material into fresh container, isolate and DO NOT SEAL. In the event of a large spill, call the emergency number listed below. 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 the manner approved for pyrotechnic material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures.

SECTION VIII - SHIPPING DATA

DOMESTIC SHIPPING DESCRIPTION:	ORM-D Flammable solid, inorganic, nos, UN 3178, PG II, Class 4.1
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SECTION IX - REACTIVITY DATA

STABILITY: stable	HAZARDOUS POLYMERIZATION: will not occur
CONDITIONS TO AVOID: Do not expose to high heat or any ignition sources of any kind	
INCOMPATIBILITY (Material to avoid): Strong oxidizers, acids, chlorate salts	
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, nitrogen oxides, sulfur oxides. and zinc oxide fumes (OSHA PEL: 5mg/kg)	

SECTION X - PHYSICAL DATA

MELTING POINT No Data	VAPOR PRESSURE No Data	VOLATILES No Data
BOILING POINT No Data	SOLUBILITY IN WATER No Data	EVAPORATION RATE No Data
SPECIFIC GRAVITY (H₂O=1) No Data	pH No Data	VAPOR DENSITY (Air=1) No Data

INFORMATION FURNISHED BY:

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