



MATERIAL SAFETY DATA SHEET
COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 09-16-95

CHEMICAL IDENTITY

LABEL IDENTITY			SCANDIUM
CHEMICAL NAME/SYNONYMS			SCANDIUM
FORMULA			Sc
CHEMICAL FAMILY			SCANDIUM METAL FOIL
HAZARDOUS INGREDIENTS			SCANDIUM
CAS #	%	OSHA :	Y
7440-20-2	>99		

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Silver foil solid, odorless
BOILING POINT	2831 C at 76 mmHg
DENSITY (gm/cc)	NA
VAPOR PRESSURE @ 20°	NA
SOLUBILITY IN WATER	Insoluble
MELTING POINT	1541 C
SPECIFIC GRAVITY (H2O=1)	2.99 at 25C
PH	NA
MOLECULAR WEIGHT	44.96

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	NA
EXTINGUISHING MEDIA	Recommended: dry chemical , Class D extinguisher, Not recommended: Water
SPECIAL FIRE FIGHTING PROCEDURES	Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
UNUSUAL FIRE AND EXPLOSION HAZARDS	Product will burn under fire conditions. May react with water liberating flammable, explosive hydrogen gas. Like all organic and most dry chemicals, as a powder or dust, this product (when mixed with air in critical proportions and in the presence of an ignition source) may present an explosion hazard.
HAZARDOUS DECOMPOSITION MATERIALS	(Under Fire Conditions) None known



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HEALTH HAZARD INFORMATION

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis**

FIRST AID MEASURES FOR ACCIDENTAL:

Eye Exposure: Rinse particulate matter from eye. Seek medical attention if irritation develops or persists or if visual changes occur.

Skin Exposure: In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops or persists.

Inhalation: If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Ingestion: If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave victim unattended.

NOTE TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically. No specific antidote available.

CARCINOGENICITY: **No** NTP: **No** IARC MONOGRAPHS: **No** OSHA REGULATE: **No**

REACTIVITY DATA

STABILITY

INCOMPATIBILITY (MATERIALS TO AVOID)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION

CONDITIONS TO AVOID

Stable

Air, strong acids, strong oxidizing agents, acid chlorides, halogens, chlorates, bromates, iodates

Hydrogen

Will Not Occur

Dusting conditions, electric arcs, open flame, spark, moisture



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SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Sweep up and place in an appropriate closed container. Vacuuming should be prohibited. Use non-sparking tools. Clean up residual material by washing area with water.

WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state and federal regulations.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION

NIOSH/MSHA approved dust mask

LOCAL EXHAUST

NA

MECHANICAL (general)

NA

PROTECTIVE GLOVES

Recommended

EYE PROTECTION

Safety glasses with side shields, chemical workers dust-proof goggles (under dusting conditions)

OTHER PROTECTIVE EQUIPMENT

Maintain a sink, safety shower & eyewash fountain in the work area. Have oxygen readily available.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

Avoid breathing dusts or vapors. Avoid direct or prolonged contact with skin and eyes. Use nonsparking tools and grounding/bonded equipment and containers when transferring. Store under inert gas. Store in tightly closed containers. Store in an area that is dry.

TRANSPORTATION STATUS:

DOT HAZARD CLASS: **4.1**

DOT SHIPPING NAME: **Flammable Solid, Inorganic, N.O.S.**

DOT ID NUMBER: **UN3178**

DOT PACKING GROUP: **III**

DOT LABELS: **Flammable Solid**

EMERGENCY GUIDE # **32**

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NA= NOT APPLICABLE

ND= NO DATA FOUND