

# MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-120/12069-94-2.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**

12069-94-2

**Code:**

M

**RTECS:****Code:**

X

**Name:**

NIOBIUM CARBIDE

**Other REC Limits:**

N/K

**OSHA PEL:**

5 MG/M3 (MFR)

**Code:**

M

**OSHA STEL:****Code:****ACGIH TLV:**

5 MG/M3 (MFR)

**Code:**

M

**ACGIH STEL:**

N/P

**Code:**

## Control Measures

**Respiratory Protection:**

ALL RESPS SHOULD BE NIOSH/MSHA APPROVED. 0.05 MG(CO)/M3:SINGLE USE APPROVED DUST & MIST RESP. 0.5 MG/(CO)/M3:DUST MASK, EXCEPT SINGLE-USE RESP. 1 MG(CO)/M3:DUST MASK, EXCEPT SINGLE-USE & QUARTER-MASK RESP S. FUME/HIGH EFFICIENCY (ING 21)

**Ventilation:**

PROVIDE LOCAL EXHAUST VENTILATION OR GENERAL DILUTION VENTILATION TO MAINTAIN EXPOSURE LEVELS BELOW TLV-TWA.

**Protective Gloves:**

IMPERVIOUS GLOVES (FP N). 13

**Eye Protection:**

ANSI APPROVED CHEM WORKERS GOGGLES (FP N).

**Other Protective Equipment:**

Equipment EYE WASH FOUNTAIN W/IN IMMEDIATE WORK AREA. CONTACT LENSES SHOULD NOT BE WORN WHEN HANDLING THESE MATERIALS.

**Work Hygienic Practices:**

NONE SPECIFIED BY MANUFACTURER.

**Supplemental Safety and Health:**

SPEC GRAV: 9.5-15.5 (H<sub>2</sub>O=1). SOL IN H<sub>2</sub>O: PRACTICALLY INSOLUBLE. FIRE FIGHT PROC: FIRE IS OUT. FOR MASSIVE FIRE IN CARGO AREA, USE UNMANNED HOSE HOLDER/MONITOR NOZZS; W/DRAW & LET FIRE BURN. USE SODA ASH, POWDERED SODIUM CHLORIDE OR SUITABLE DRY PWDR. AVOID BURNING FUMES FROM BURNING MATL.

## Health Hazards Data

**LD50/LC50 Mixture:**

NONE SPECIFIED BY MANUFACTURER.

**Route of Entry Inds - Inhalation:**

YES

**Skin:**

YES

**Ingestion:**

YES 11

**Carcinogenicity Inds - NTP:**

NO

**IARC:**

YES

**OSHA:**

NO

**Health Hazards Acute And Chronic:**

ACUTE: INHAL:IRRIT/SENSITIZER. 20 MG(CO)/M3 IS IMMEDIATELY DANGEROUS TO LIFE & HEALTH. INHAL MAY CAUSE IRRIT OF NOSE & THROAT. ING 1: MAY CAUSE COUGH, DYSPNEA, SORENESS IN CHEST, WT LOSS, HEMOPTYSIS, BRONCH & ASTHMA. MAY ALSO CAUSE PULM FIBROSIS. RADIOLOGICAL CHGS MAY BE NOTICED IN LUNGS. ING 2: MAY CAUSE EFTS OF OVEREXP)

**Explanation Of Carcinogenicity:**

COBALT: IARC MONO ON EVAL OF CARCIN RISK OF CHEMS TO MAN, VOL 52, PG 363, 1991: GRP 2B. ANIMAL: PULM FIBROSIS (BLOOD EFTS).

**Signs And Symptoms Of Overexposure:**

HLTH HAZ: SHORTNESS OF BREATH, ASTHMA, DYSPNEA ON EXERTION, WHEEZ, INTERSTITIAL PNEUM & OR LUNG DENSITIES. ING 4: MAY BE CONSIDERED NUISANCE DUST & MAY RSLT IN DUST ACCUM IN LUNGS. ING 5: MAY CAUSE RESP IRRIT. SKIN: IRRIT/SENSITIZER. ING 1: MAY CAUSE IRRIT W/DERM, ECZEMA & ITCH; ALSO SENSIT DERM IF PREVIOUSLY EXPOS.(ING 10)

**Medical Cond Aggravated By Exposure:**

PREEXISTING PULMONARY & SKIN CONDITIONS SUCH AS EMPHYSEMA, ASTHMA, BRONCHITIS AND DERMATITIS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

**First Aid:**

INHAL: REMOVE FROM EXPOS TO FRESH AIR IMMED. IF BURNING HAS SPED, PERFORM ARTIFICIAL RESPIRATION. KEEP WARM & @ REST. GET MED ATTN IMMED. SKIN: REMOVE CONTAMINATED CLOTHING & SHOES IMMED. WASH AFFECTED AREA W/SOAP/MILO DET. ERGENT & LG AMTS OF WATER UNTIL NO EVID OF MATL REMAINS (APPROX 15-20 MIN). GET MED ATTN. EYES: WASH IMMED W/LG AMTS OF WATER, OCCAS LIFTING EYELIDS UNTIL NO EVID OF MATL REMAINS (AT LEAST 15- (ING 18)

**Spill Release Procedures:**

SWEEP UP W/MINIMUM OF DUST GENERATION & PLACE IN SUITABLE CLEAN, DRY CONTAINERS FOR LATER DISPOS OR RECLAMATION. RESIDUE SHOULD BE CLEANED UP USING HIGH-EFFICIENCY PARTICULATE FILTER VACUUM OR WET CLEAN-UP. USE APPROP NIOSH/MSHA APPROVED RESP PROTECTION.

**Neutralizing Agent:**

NONE SPECIFIED BY MANUFACTURER.

**Waste Disposal Methods:**

THIS IS VALUABLE MATERIAL THAT SHOULD BE SENT TO AN APPROPRIATE RECLAMATION FACILITY IF AVAILABLE. IF MATERIAL CANNOT BE SENT TO RECLAMATION FACILITY, DISPOSAL SHOULD BE MADE IN COMPLIANCE WITH FEDERAL, STATE & LOCAL ENVIRONMENTAL REGULATIONS.

**Handling And Storage Precautions:**

12 MINIMIZE FREE FALL OF PWDR & AVOID DISPERSION OF DUST IN AIR. FINELY DIVIDED PARTICLES, DUST/FUMES MAY BE FLAM/EXPLO. KEEP AWAY FROM SPARKS (ING 20)

**Other Precautions:**

WASH HANDS THORO AFTER HANDLING, BEFORE EATING OR SMOKING. DO NOT SHAKE CLOTHING, RAGS OR OTHER ITEMS TO REMOVE DUST. DUST SHOULD BE REMOVED BY WASHING/VACUUMING. PERIODIC MED EXAMS ARE RECOMMENDED FOR INDIVIDUALS REGULARLY EXPOSED TO DUST OR MIST.

## Fire and Explosion Hazard Information

**Flash Point Method:**

N/P

**Flash Point:****Flash Point Text:**

N/K

**Autoignition Temp:**

N/A

**Autoignition Temp Text:**

N/A

**Lower Limits:**

N/K

**Upper Limits:**

N/K

**Extinguishing Media:**

FOR LOCALIZED POWDER FIRES, SMOTHER WITH DRY SAND, DRY DOLOMITE, SODIUM CHLORIDE OR SODA ASH.

**Fire Fighting Procedures:**

USE NIOSH/MSHA APPROVED SCBA & FULL PROT EQUIP(FP N). MOVE CONTAINERS FROM FIRE AREA IF POSS. COOL CONTAINERS EXPOS TO FLAME W/WATER FROM SIDE UNTIL WELL AFTER (SUPDAT)

UNUSUAL FIRE/EXPLOSION HAZARD: FINELY DIVIDED TUNGSTEN CARBIDE POWDER/DUST FROM GRINDING IS EXPECTED TO BE FIRE & EXPLO HAZ WHEN EXPOSED TO HIGH TEMPS/IGNIT SOURCES. PARTICLE SIZE & (ING 6)

## Physical/Chemical Properties

**HCC:****NRC/State Lic No:****Net Prop WT For Ammo:**

N/P

**Boiling Point:**

N/P

**B.P. Text:**

5198F/2870C

**Melt/Freeze Pt:**

2723F/1495C

**Decomp Temp:**

N/K

**Decomp Text:**

N/K

**Vapor Pres:**

N/K

**Vapor Density:**

N/K

**Volatile Org Content %:**

N/A

**Spec Gravity:**

SUPDAT

**VOC Pounds/Gallon:**

N/P

**PH:**

N/K

**VOC Grams/Liter:**

N/P

**Viscosity:**

N/P

**Evaporable Rate & Reference:**

NEGLIGIBLE

**Solubility in Water:**

SUPDAT

**Appearance and Odor:**

GRAY POWDER OR SOLID. 14

**Percent Volatiles by Volume:**

NEGLIG

**Corrosion Rate:**

N/K

## Reactivity Data

**Stability Indicator:**

YES

**None Specified by Manufacturer:**

NONE SPECIFIED BY MANUFACTURER.

**Materials To Avoid:**

W/CHLORINE TRIFLUORIDE: REACTS W/FLAME, FLUORINE: INCANDESCES, NITROGEN DIOXIDE NITROUS OXIDE: (ING 7)

**Hazardous Decomposition Products:**

THERMAL DECOMPOSITION MAY RELEASE ACRID SMOKE AND IRRITATING FUMES.

**Hazardous Polymerization Indicator:**

NO

**Conditions To Avoid Polymerization:**

NOT RELEVANT

## Toxicological Information

**Information:**

N/P

**Information:**

N/P