

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-101/10101-52-7.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:

10101-52-7

Code:

M

RTECS:

9999999ZZ

Code:

M

Name:

ZIRCONIUM SILICATES

Other REC Limits:

N/K

OSHA PEL:

N/K (FP N)

Code:

M

OSHA STEL:

Code:

ACGIH TLV:

N/K (FP N)

Code:

M

ACGIH STEL:

N/P

Code:

Control Measures

Respiratory Protection:

USE NIOSH APPROVED RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR GENERAL WORK AREA WHERE LOCAL EXHAUST AND/OR VENTILATION DOES NOT KEEP EXPOSURE BELOW THE THRESHOLD LIMIT VALUE.

Ventilation:

USE PLENTY OF VENT &/OR LOC EXHST AT ARC TO KEEP FUMES & GASES BELOW TLV W/IN WORKER'S BREATHING ZONE & GEN WORK AREA.

Protective Gloves:

WELDER'S GLOVES.

Eye Protection:

ANSI APPROVED CHEM WORKERS GOGGS (ING 25)

Other Protective Equipment:

Equipment ANSI APPROVED EYE WASH DELUGE SHOWER (FP N). ARM PROTECTORS, APRON, HATS, SHOULDER PROT DARK SUBSTANTIAL CLTHG.

Work Hygienic Practices:

TRAIN WELDER NOT TO ALLOW ELEC LIVE PARTS TO CONTACT SKIN/WET CLTHG GLOVES TO INSULATE THEMSELVES FROM WORK GROUND.

Supplemental Safety and Health:

HAZ DECOMP PRODS: WELDED, PROCS FOLLOWED & ELECTRODES USED. REASONABLE EXPECTED FUME CONSTITUENTS OF PROD WOULD INCL: COMPLEX OXIDES OF ALUMINUM, IRON, MANGANESE, SILICON, TITANIUM, CHROMIUM, NICKEL, CALCIUM, COLUMBIAN, MOYBDENUM & COPPER. FLUORIDES WILL ALSO BE PRESENT. FUME LIM FOR (CR(VI))(0.05 MG/M3) MAY (ING 18)

Health Hazards Data

LD50/LC50 Mixture:

NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation:

YES

Skin:

YES

Ingestion:

NO

Carcinogenicity Inds - NTP:

YES

IARC:

YES

OSHA:

NO

Health Hazards Acute And Chronic:

ACUTE OVEREXP TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZ, NAUS OR DRYNESS/IRRIT OF NOSE, THROAT/EYES. INHAL OF EXTREMELY HIGH LEVELS OF FLUORIDES MAY CAUSE ABDOM PAIN, DIARR, MUSC WEAK & CON VLS. CONTINUED INHAL COULD CAUSE UNCON & DEATH. CHROMIUM (VI) CMPDS PRESENT IN FUME MAY CAUSE SEV IRRIT(EFTS OF OVEREXP)

Explanation Of Carcinogenicity:

NICKEL: IARC MONO, VOL 49, PG 257, 1990: GRP 2B. NTP 7TH ANNUAL RPT ON CARCINS, 1994: ANTIC TO BE CARCIN. SILICA, (ING 20)

Signs And Symptoms Of Overexposure:

HLTH HAZ: OF BRONCH TUBES & LUNGS. INGEST OF CHROMIUM (VI) SALTS MAY CAUSE INJURY/DEATH. CHROMIUM(VI) CMPDS MAY BURN EYES. CHROMIUM CMPDS MAY CAUSE ALLERGIC RXNS. NICKEL OXIDES IN FUME MAY CAUSE TIGHTNESS AROUND CHEST, FEVER & ALLERGIC RXNS. CHRONIC OVEREXP TO WELDING FUMES CAN LEAD TO SIDEROSIS (IRON DEPOSITS (ING 21))

Medical Cond Aggravated By Exposure:

NONE SPECIFIED BY MANUFACTURER.

First Aid:

12 INGEST: CALL MD IMMED (FP N). EYES: IMMED FLUSH W/POTABLE WATER FOR A MINIMUM OF 15 MINUTES, SEEK ASSISTANCE FROM MD (FP N). SKIN: FLUSH W/COPIOUS AMTS OF WATER, CALL MD (FP N). CALL FOR MED ASSISTANCE. USE FIRST AID PROCEDURES RECOM BY AMERICAN RED CROSS. IF BREATHING IS DFCLT, GIVE OXYGEN. IF NOT BREATHING USE CPR. CONSULT MD IF IRRITATION OF EYES & SKIN OR FLASH BURNS DEVELOP AFTER EXPOSURE.

Spill Release Procedures:

NONE SPECIFIED BY MANUFACTURER.

Neutralizing Agent:

NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods:

DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER APPROVED BY FEDERAL, STATE AND LOCAL REGULATIONS.

Handling And Storage Precautions:

READ & UNDERSTAND MFR'S INSTRUCTIONS & PREC LABEL ON PROD. ADVISE WELDERS TO KEEP THEIR HEAD OUT OF FUMES. SEE ANSI Z49.1 & 29 CFR 1910 FOR MORE INFO.

Other Precautions:

ONE METHOD OF DETERMINING COMPOSITION & QTY OF FUMES & GASES TO WHICH WORKERS ARE EXPOSED IS TO TAKE AIR SAMPLE FROM INSIDE WELDER'S HELMET WHILE WORN OR IN WORKER'S BREATHING ZONE. SEE ANSI/AWS F1.1 AVAIL FROM AMERICAN WELDING SOCIETY.

Fire and Explosion Hazard Information

Flash Point Method:

N/P

Flash Point:

N/K

Flash Point Text:

N/K

Autoignition Temp:

N/A

Lower Limits:

N/K

Upper Limits:

N/K

Extinguishing Media:

MEDIA SUITABLE FOR SURROUNDING FIRE (FP N).

Fire Fighting Procedures:

USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT (FP N). 13

Unusual Fire/Explosion Hazard:

NONFLAMMABLE: WELDING ARC AND SPARKS CAN IGNITE COMBUSTIBLES. SEE Z-49.1 SAFETY IN WELDING & CUTTING, PUBLISHED BY AWS, 550 NW 1ST AVENUE, MIAMI, FL 33126.

Physical/Chemical Properties

HCC:

NRC/State Lic No:

Net Wt For Ammo:

N/A

Boiling Point:

N/A

B.P. Text:

N/A

Melt / Freeze Pt:

N/A

M.P./F.P. Text:

N/A

Decomp Temp:

N/A

Decomp Text:

N/A

Vapor Pres:

N/A

Vapor Density:

N/A

Volatile Org Content %:

Spec Gravity:

N/A

VOC Pounds/Gallon:

N/A

PH:

N/A

VOC Grams/Liter:

N/A

Viscosity:

N/P

Evaporation Rate & Reference:

N/A

Stability in Water:

N/A

Appearance and Odor:

NONE SPECIFIED BY MANUFACTURER.

Percent Volatiles by Volume:

N/A

Corrosion Rate:

N/A

Reactivity Data

Stability Indicator:

YES

Stability Condition To Avoid:

NONE SPECIFIED BY MANUFACTURER.

Materials To Avoid:

NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:

WELDING FUMES GASES CANNOT BE CLASSIFIED SIMPLY. COMPOSITION QTY OF FUMES GASES DEPEND ON METAL BEING (SUPPLY)

Hazardous Polymerization Indicator:

NO

Conditions To Avoid Polymerization:

NOT RELEVANT

Toxicological Information

Information:

N/P

MSDS Transport Information

Information:

N/P

Regulatory Information

Sara Title III Information:

N/P

Federal Regulatory Information:

N/P

State Regulatory Information:

N/P

Other Information

Other Information:

N/P

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