

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-224/22464-99-9.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:

22464-99-9

Code:

M

RTECS:**Code:**

X

Name:

ZIRCONIUM COMPOUNDS (SARA 313)

Other REC Limits:

NONE SPECIFIED

OSHA PEL:

5 PPM

Code:

M

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

5 PPM

Code:

M

ACGIH STEL:

N/P

Code:

Control Measures

Respiratory Protection:

IF TLV IS EXCEEDED, USE NIOSH/MSHA APPROVED SUPPLIED AIR BREATHING APPARATUS

Ventilation:

USE IN WELL VENTILATED AREAS. AVOID BREATHING FUMES

Protective Gloves:

IMPERVIOUS GLOVES

Eye Protection:

N/K

Other Protective Equipment:

Equipment N/K

Work Hygienic Practices:

N/K

Supplemental Safety and Health:

**APPLICABLE EPA HAZARDOUS WASTE NUMBER FOR THIS MATERIAL IS U239 (IGNITABLE). THE CLEAN AIR AND WATER ACT (CWA) REQUIRES THAT SPILLS ABOVE THE REPORTABLE LIMIT BE REPORTED IMMEDIATELY TO THE NATIONAL RESPONSE CENTER AT 800-424-8802. THE REPORTABLE LIMIT FOR THIS MATERIAL IS 8333 LBS.

Health Hazards Data

LD50/LC50 Mixture:

N/K

Route Of Entry Inds - Inhalation:

YES

Skin:

YES

Ingestion:

NO

Carcinogenicity Inds - NTP:

NO

IARC:

NO

OSHA:

NO

Health Hazards Acute And Chronic:

PROLONGED OR REPEATED EXPOSURE MIGHT RESULT IN PERMANENT DAMAGE TO LIVER, NERVOUS SYSTEM, EYES OR OTHER IRRITATION CAN BE SYMPTOMS OF OVER EXPOSURE

Explanation Of Carcinogenicity:

N/K

Signs And Symptoms Of Overexposure:

INHAL: IRRIT OF RESPIRATORY TRACT, WEAKNESS, DIZZINESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS AND DEATH. EYE: SEVERE IRRITATION AND ALLERGIC REACTION. SKIN: PROLONGED OR REPEATED EXPOSURE-IRRIT, DERMATITIS, LOCAL DEFATTING, REDNESS, DRYNESS. INGEST: SEVERE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA

Medical Cond Aggravated By Exposure:

3 NONE KNOWN

First Aid:

EYES AND SKIN: FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. INHALATION: REMOVE TO FRESH AIR. INGESTION: DRINK 1 TO 2 GLASSES OF WATER. DO NOT INDUCE VOMITING. CONSULT A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. FOR EXCESSIVE EXPOSURES OR IF SYMPTOMS PERSIST ALWAYS CONSULT A PHYSICIAN.

Spill Release Procedures:

CONTAIN SPILL WITH DIKES. WARNING: FLAMMABLE. REMOVE IGNITION SOURCES. PREVENT ENTRY INTO BODIES OF WATER OR SEWERS.

Neutralizing Agent:

N/K

Waste Disposal Methods:

USE A DISPOSAL FACILITY APPROVED UNDER RCRA FOR HAZARDOUS MATERIALS. USE NON-LEAKING CONTAINERS; SEAL TIGHTLY AND LABEL PROPERLY. SOME OF THE MATERIALS IN THIS ADMIXTURE ARE DESIGNATED BY 40CFR261.33 AS HAZARDOUS MATERIALS IF DISCARDED AS IS. THE**

Handling And Storage Precautions:

STORE AWAY FROM HEAT OR OPEN FLAME AND OTHER IGNITION SOURCES.

Other Precautions:

KEEP AWAY FROM CHILDREN.

Fire and Explosion Hazard Information

Flash Point Method:

TCC

Flash Point:**Flash Point Text:**

40.0F, 4.4C

Autoignition Temp:**Autoignition Temp Text:**

N/K

Lower Limits:

0.9

Upper Limits:

6.0

Extinguishing Media:

DRY CHEMICAL, CHEMICAL FOAM, CO2

Fire Fighting Procedures:

4 SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PROTECTION AND POSITIVE PRESSURE

Unusual Fire/Explosion Hazard:

VAPORS FROM PROD HEAVIER THAN AIR-MAY TRAVEL DISTANCE & BE IGNITED BY INTENSE HEAT/OPEN FLAME/ELECT SPARKS.

UNOPENED CNTNRS EXPOSED TO INTENSE HEAT-MAY EXPLODE

Physical/Chemical Properties

HCC:

F2

NRC/State LIC No:

N/K

Net Prop WT For Ammo:

5

Boiling Point:**B.P. Text:**

240 °F

Melt/Freeze Pt:**M.P./F.P. Text:**

N/K

Decomp Temp:**Decomp Text:**

N/K

Vapor Pres:

40 @ 20C

Vapor Density:

>1

Volatile Org Content %:**Spec Gravity:**

1.49

VOC Pounds/Gallon:**VOC:**

N/K

VOC Grams/Liter:**VOC:**

N/K

Viscosity:

N/K

Evaporation Rate & Reference:

(H2O=1) >1

Solubility in Water:

N/A

Appearance and Odor:

YELLOW VISCOS LIQUID, PETROLEUM ODOR.

Percent Volatiles by Volume:

N/K

Corrosion Rate:

N/K

Conditions To Avoid Polymerization:**Conditions To Avoid Polymerization:**

N/K

Reactivity Data

Stability Indicator:

YES

Stability Condition To Avoid:

N/K

Materials To Avoid:**Hazardous Decomposition Products:**

N/A

Hazardous Polymerization Indicator:

NO

Conditions To Avoid Polymerization:**Conditions To Avoid Polymerization:**

N/K

Toxicological Information

Information:

N/P

Information: