

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-130/1306-38-3.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
1306-38-3

**Code:**  
M

**RTECS:**

**Code:**  
X

**Name:**  
CERIUM OXIDE (CEO\*2)

**Other REC Limits:**  
NONE SPECIFIED

**OSHA PEL:**  
NOT ESTABLISHED

**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
NOT ESTABLISHED

**Code:**  
M

**ACGIH STEL:**

**N/P**

**Code:**

## Control Measures

### Respiratory Protection:

USE WELD FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENERAL VENTILATION DOES NOT KEEP EXPOSURE BELOW RECOMMENDED LIMITS. USE ONLY NIOSH APPROVED RESPIRATORS.

### Ventilation:

USE ENOUGH VENTILATION WHEN CUTTING, GRINDING OR WELDING TO KEEP THE DUST, FUMES & GASES FROM THE WORKERS BREATHING ZONE

### Protective Gloves:

WELDERS LEATHER GLOVES

### Eye Protection:

OSHA APPROVED GOGGLES/FACE SHIELD W/LENS 7

### Other Protective Equipment:

Equipment FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

### Work Hygienic Practices:

WASH THOROUGHLY BEFORE EATING OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

### Supplemental Safety and Health:

WELDING AND HOT CUTTING FUMES & GASES CANNOT BE CLASSIFIED SIMPLY. THEIR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE METAL BEING WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR ELECTRODES USED. OTHER INFLUENCING FACTORS ARE THE PRESENCE OF CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

## Health Hazards Data

### LD50/LC50 Mixture:

UNCLASSIFIED WELDING FUMES = 5MG/M3 PEL

### Route Of Entry/Inds - Inhalation:

YES

**Skin:**  
YES

**Ingestion:**  
NO

### Carcinogenicity/Inds - NTP:

YES

**IARC:**  
YES

**OSHA:**  
NO

### Health Hazards Acute And Chronic:

5 SHORT TERM EXPOSURE TO WELDING FUMES, GASES OR DUST MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. A CUTE EXPOSURE FROM SOME TOXIC GASES MAY CAUSE PULMONARY EDEMA, ASPHYXIATION AND EXCESSIVE EXPOSURE CAN BE FATAL.

### Explanation Of Carcinogenicity:

NICKEL AND CHROMIUM ARE CONSIDERED POSSIBLE CARCINOGENS UNDER OSHA. RESPIRATORY CANCER FROM WELDING IS UNCONFIRMED.

### Signs And Symptoms Of Overexposure:

EXPOSURE TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. WATERY EYES, HEADACHE, BREATHING DIFFICULTY, FREQUENT COUGHING AND/OR CHEST PAINS MAY OCCUR FROM ACUTE EXPOSURE. TOXIC GASES CAN BE FATAL.

### Medical Cond Aggravated By Exposure:

SOME WORKERS MAY BE AFFECTED BY A PRE-EXISTING CONDITION OR OTHER OCCUPATIONAL ILLNESS BECAUSE OF THE WIDE VARIATION IN INDIVIDUAL SUSCEPTIBILITIES.

### First Aid:

IN CASE OF ELECTRICAL SHOCK, TURN OFF POWER PRIOR TO REMOVAL FROM EXPOSURE AREA AND ADMINISTRATION OF FIRST AID. REMOVE FROM EXPOSURE AREA AND CALL FOR MEDICAL AID. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT. IF NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF NO DETECTABLE PULSE, BEGIN EXTERNAL HEART MASSAGE. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

### Spill Release Procedures:

CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES AND PLACE IN SUITABLE DOT APPROVED CONTAINERS AND DISPOSE OF IN FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. AVOID INHALATION AND SKIN EXPOSURE.

### Neutralizing Agent:

NOT APPLICABLE

### Waste Disposal Methods:

DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS

### Handling And Storage Precautions:

WEAR GLOVES AND FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

### Other Precautions:

6 PROVIDE PROTECTIVE SCREENS TO SHIELD OTHERS. WHEN ELECTRODES AND FLUXES ARE CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS GENERATED ARE DIFFERENT IN FORM FROM THE INGREDIENTS LISTED. NEW COMPOUNDS NOT IN THE ELECTRODES MAY FORM.

## Fire and Explosion Hazard Information

### Flash Point Method:

N/P

### Flash Point:

N/P

### Flash Point Text:

N/R

### Autoignition Temp:

N/R

### Autoignition Temp Text:

N/R

### Lower Limits:

N/R

### Upper Limits:

N/R

### Extinguishing Media:

USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL AS APPROPRIATE FOR SURROUNDING MATERIAL.

### Fire Fighting Procedures:

FIREFIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

### Unusual Fire/Explosion Hazard:

FIRES OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS DECOMPOSITION PRODUCTS. METALLIC FUMES AND FLUORIDES COULD BE GENERATED AT HIGH TEMPERATURE.

## Physical/Chemical Properties

**HCC:**

N1

**NRC/State Lic No:**

Net Prop WT For Ammo:

Boiling Point:

N/P

**B.P. Text:**

N/R

**Melt/Freeze Pt:**

N/P

**Decomp Text:**

UNKNOWN

**Vapor Pres:**

N/P

**N/P:**

**Vapor Density:**

N/R

**Volatile Org Content %:**

N/R

**Spec Gravity:**

4-5

**VOC Pounds/Gallon:**

N/R

**VOC Grams/Liter:**

N/P

**Viscosity:**

N/P

**Evaporation Rate & Reference:**

N/R

**Solubility in Water:**

NEGLIGIBLE

**Appearance and Odor:**

ODORLESS METALLIC SILVER COLORED WIRE WITH A FLUX COATING

**Percent Volatiles by Volume:**

N/R

**Corrosion Rate:**

UNKNOWN

## Reactivity Data

### Stability Indicator:

YES

### Stability Condition To Avoid:

HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES

### Materials To Avoid:

STRONG OXIDIZING AGENTS AND STRONG OXIDIZING ACIDS.

### Hazardous Decomposition Products:

WELDING AND CUTTING OPERATION MAY INCLUDE OXIDES OF THE METALS, CHROMATES, FLUORIDES, COMPLEX METALLICS, AND OZONE.

### Hazardous Polymerization Indicator:

NO

### Conditions To Avoid Polymerization:

NOT APPLICABLE

## 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

**LookChem**™

Look for Chemicals

[www.lookchem.com](http://www.lookchem.com)

For R&D use only. Not for drug, household or other uses.  
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee and is not a warranty, expressed or implied, of the product's fitness for a particular purpose, term of sale or conditions of sale. Lookchem shall not be held liable for any damage resulting from the use of the information contained herein or from any breach of the terms and conditions of sale.