

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-133/1333-88-6.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
1333-88-6
Code:
M
RTECS:
Code:
X
Name:
COBALT ALUMINUM OXIDE
Other REC Limits:
NONE RECOMMENDED
OSHA PEL:
0.05 MG/M3 FUME(CO)
Code:
M
OSHA STEL:
Code:
ACGIH TLV:
0.05 MG/M3 FUME(CO)
Code:
M
ACGIHSTEL:
N/P
Code:

Control Measures

Respiratory Protection:
FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR IN CONFINED SPACES OR WHERE VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.
Ventilation:
LOCAL EXHAUST TO KEEP BELOW TLV.
Protective Gloves:
WELDER'S GLOVES.
Eye Protection:
HELMET OR FACE SHIELD WITH FILTER LENS.
Other Protective Equipment:
Equipment SUBSTANTIAL DARK CLOTH, ARM PROTECTOR, APRON, HAT AND SHOULDER PROTECTION. AIR SAMPLING TO DETERMINE CORRECTIVE MEASURES 5
Work Hygienic Practices:
WASH HANDS THOROUGHLY BEFORE EATING, SMOKING OR USING SANITARY FACILITIES.
Supplemental Safety and Health:
NONE.

Health Hazards Data

LD50LC50Mixture:
TLV FOR WELDING FUMES IS 5 MG/M3
Route Of Entry Inds - Inhalation:
YES
Skin:
NO
Ingestion:
NO
Carcinogenicity Inds - NTP:
YES
IARC:
YES
OSHA:
NO
Health Hazards Acute And Chronic:
ACUTE: FUMES AND GASES CAN CAUSE EYES AND UPPER RESPIRATORY SYSTEM IRRITATION, AND CENTRAL NERVOUS SYSTEM EFFECTS. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL. NOISE CAN DAMAGE HEARING. CHRONIC: NEUROLOGICAL DAMAGE, LUNG FIBROSIS, PNEUMOCONIOSIS.
Explanation Of Carcinogenicity:
NICKEL AND CHROMIUM ARE LISTED UNDER IARC AND NTP.
Signs And Symptoms Of Overexposure:
SHORT TERM EXPOSURE: NAUSEA, FEVER, DIZZINESS, DRYNESS, IRRITATION OF EYES, NOSE AND THROAT, SKIN SENSITIVITY, WATERY EYES, HEADACHE, BREATHING DIFFICULTY, FREQUENT COUGHING, SHORTNESS OF BREATH.
Medical Cond Aggravated By Exposure:
AGGRAVATION OF EXISTING RESPIRATORY OR ALLERGIC CONDITIONS.HIGHER LEVEL OF LUNG RELATED PROBLEMS AMONG SMOKERS.
First Aid:
INHALATION: REMOVE FROM EXPOSURE. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE CPR. IF NO DETECTABLE PULSE, GIVE HEART MASSAGE. EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SKIN: WASH WITH SOAP AND WATER. INGESTION: SEEK MEDICAL ATTENTION.
Spill Release Procedures:
CLEAN UP ANY GRINDING DUST OR WASTE RESIDUE AND PLACE IN APPROPRIATE DISPOSAL CONTAINER. AVOID INHALATION AND SKIN EXPOSURE.
Neutralizing Agent:
4 NOT APPLICABLE
Waste Disposal Methods:
CONSULT WITH YOUR LOCAL ENVIRONMENTAL OFFICER. DISPOSE OF FUMES, FLUX OR WELD GRINDING RESIDUE FROM THE WORK AREA OR FROM FILTERS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.
Handling And Storage Precautions:
STORE IN DRY AREA. ELECTRODES EXPOSED TO MOISTURE MAY EXPLODE VIOLENTLY IF USED. DRY MOIST RODS BY BAKING AT 300F FOR TEN HOURS.
Other Precautions:
TRAIN WELDER TO KEEP HIS HEAD OUT OF THE FUMES. MONITOR AIR TO ENSURE ACCEPTABLE EXPOSURES. AVOID ELECTRICAL SHOCK BY MAINTAINING DRY WORK AREA.

Fire and Explosion Hazard Information

Flash Point Method:
N/P
Flash Point:
Flash Point Text:
N/R
Autoignition Temp:
Autoignition Temp Text:
N/A
Lower Limits:
N/R
Upper Limits:
N/R
Extinguishing Media:
USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL.
Fire Fighting Procedures:
WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.
Unusual Fire/Explosion Hazard:
COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. WELDING ARCS AND SPARKS CAN IGNITE COMBUSTIBLE MATERIAL.

Physical/Chemical Properties

HCC:
N1
NRC/State LIC No:
N/R
Net Prop WT For Ammo:
Boiling Point:
B.P. Text:
N/R
Melt/Freeze Pt:
M.P/F.P Text:
N/R
Decomp Temp:
Decomp Text:
N/R
Vapor Pres:
N/R
Vapor Density:
N/R
Volatile Org Content %:
Spec Gravity:
N/R
VOC Pounds/Gallon:
PH: N/R
VOC Grams/Liter:
Viscosity:
N/P
Evaporation Rate & Reference:
N/R
Solubility in Water:
INSOLUBLE.
Appearance and Odor:
14"X0.25" WELDING ROD.
Percent Volatiles by Volume:
N/R
Corrosion Rate:
N/R

Reactivity Data

Stability Indicator:
YES
Stability Condition To Avoid:
AVOID GENERATION OF AIRBORNE DUST.
Materials To Avoid:
NONE.
Hazardous Decomposition Products:
FUMES OF METALS AND METAL OXIDES FROM ELECTRODE AND BASE METAL, CARBON MONOXIDE, CARBON DIOXIDE, OZONE, NITROGEN OXIDES.
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