CHEMICAL IDENTITY

LABEL IDENTITY
CHEMICAL NAME/SYNONYMS
FORMULA
CHEMICAL FAMILY
CAS REGISTRY NUMBER
HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>%</th>
<th>TLV</th>
<th>OSHA/PEL</th>
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<tr>
<td>0.0 - 100.0</td>
<td>.05 mg/m3</td>
<td>NE</td>
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PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR
BOILING POINT
DENSITY (gm/cc)
VAPOUR PRESSURE @ 20°
% VOLATILE BY VOLUME (%)
REACTION WITH WATER
EVAPORATION RATE (H2O=1)
SOLUBILITY IN WATER
MELTING POINT
PHYSICAL STATE

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT
AUTOIGNITION TEMPERATURE (°C)
FLAMMABILITY
EXTINGUISHING MEDIA
SPECIAL FIRE FIGHTING PROCEDURES contained

UNUSUAL FIRE & EXPLOSION HAZARDS

None recorded
COBALT SILICIDE
MATERIAL SAFETY DATA SHEET

HEALTH HAZARD INFORMATION

HMIS RATING:
HEALTH: 2   FLAMMABILITY: 0   REACTIVITY: 0   PERSONAL PROTECTION: X

ROUTES OF ENTRY: INHALATION: Yes   SKIN: Yes   INGESTION: Yes   EYES: Yes

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: Pre-existing respiratory or skin disorders
EFFECTS OF EXPOSURE (acute and chronic):
INHALATION: May cause shortness of breath, labored breathing, coughing and loss of weight
DERMAL: May cause redness, itching and inflammation
EYES: May cause redness, itching and watering
INGESTION: Acute cobalt poisoning may cause: diarrhea, lower blood pressure and body temperature

CARCINOGENICITY:
IARC MONOGRAPHS: No   NTP: No
OSHA REGULATE: No

EMERGENCY FIRST AID PROCEDURES:
INGESTION: Give 1 to 2 glasses of milk or water and induce vomiting; seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.
INHALATION: Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention.
SKIN CONTACT: Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention if symptoms persist.
EYE CONTACT: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.

REACTIVITY DATA

STABILITY
CONDITIONS CONTRIBUTING TO UNSTABILITY
INCOMPATIBILITY (MATERIALS TO AVOID)
HAZARDOUS DECOMPOSITION PRODUCTS
HAZARDOUS POLYMERIZATION
CONDITIONS TO AVOID

Stable
None
None recorded
None recorded
Will Not Occur
None
SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate respiratory and protective equipment specified in section VIII-control measures. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

WASTE DISPOSAL METHOD: Dispose of in accordance with applicable federal, state and local regulations.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION
Wear NIOSH-approved respirator

LOCAL EXHAUST
Maintain concentration at low concentrations.

MECHANICAL (general)
Recommended

PROTECTIVE GLOVES
Rubber Gloves

EYE PROTECTION
Safety glasses

OTHER PROTECTIVE EQUIPMENT
Protective gear suitable to prevent contamination.

WORK/HYGIENIC/MAINTENANCE PRACTICES
Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: None

PRECAUTIONARY LABELING: Store in cool, dry area. Store in tightly sealed container. Wash thoroughly after handling

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NA= NOT APPLICABLE
NE= NOT ESTABLISHED
NR= NOT RECORDED