

## **TUNGSTEN CARBIDE-COBALT,AI-1172 & AI-1172-TG**

### **MSDS Number**

BYFNQ

### **National Stock Number**

3439-01-380-1896

### **Product Name**

TUNGSTEN CARBIDE-COBALT,AI-1172 & AI-1172-TG

### **Manufacturer**

MILLER THERMAL TECHNOLOGIES INC ALLOYS INTL DIV

### **Product Identification**

Product ID:TUNGSTEN CARBIDE-COBALT,AI-1172 & AI-1172-TG

MSDS Date:08/01/1991

FSC:3439

NIIN:01-380-1896

MSDS Number: BYFNQ

### **Responsible Party**

MILLER THERMAL TECHNOLOGIES,INC.,ALLOYS INTL. DIV.

1901 ELLIS SCHOOL ROAD

BAYTOWN , TX 77521

US

Emergency Phone: 713-426-5535

Info Phone: 713-426-5535

Cage: 06677

### **Contractor**

MILLER THERMAL TECHNOLOGIES,INC.,ALLOYS INTL. DIV.

BAYTOWN, TX 77521-1215

US

713-426-5535

Cage: 06677

### **Ingredients**

TUNGSTEN CARBIDE

CAS: 12070-12-1

RTECS: YO7250000

Fraction By Weight: 88.5%

OSHA PEL5 MG W/M3

ACGIH TLV: 5 MG W/M3

COBALT (SARA 313)

CAS: 7440-48-4

RTECS: GF8750000

Fraction By Weight: 12%

OSHA PEL0.1 MG/M3

ACGIH TLV: 0.02 MG/M3; A3; 9495

## Hazards

LD50 LC50 Mixture:LD50 (ORAL RAT) IS NOT RELEVANT.  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:TARGET ORGANS:EYES, SKIN, LUNGS.  
ACUTE- INHALATION MAY CAUSE SERIOUS RESPIRATORY ILLNESS THAT CAN BE FATAL. EYE CONTACT MAY CAUSE IRRITATION. SKIN CONTACT MAY CAUSE ALLERGIC REACTION. HARMFUL IF INGESTED. CHRONIC- UNKNOWN.  
Explanation of Carcinogenicity:NONE  
Effects of Overexposure:IRRITATION, ALLERGIC SKIN REACTION, COUGH, WHEEZING AND SHORTNESS OF BREATH, DECREASED PULMONARY FUNCTION, HEADACHE, NAUSEA, VOMITING, PAIN, WEAKNESS  
Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PRE-EXISTING DISEASES OF THE EYE, SKIN, RESPIRATORY TRACT MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

## First Aid

First Aid:CALL PHYSICIAN IF SYMPTOMS PERSIST. EYE:IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. CALL PHYSICIAN.  
SKIN:WASH WITH SOAP & WATER. INHALED:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. ORAL:IF CONSCIOUS, INDUCE VOMITING. CALL A PHYSICIAN/POISON CONTROL CENTER IMMEDIATELY. NEVER GIVE FLUID OR INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAS CONVULSIONS.

## Fire Fighting

Flash Point:NONE  
Extinguishing Media:USE DRY POWDER, CARBON DIOXIDE, WATER. USE NITROGEN GAS FOR INDIVIDUAL CONTAINER WHERE O<sub>2</sub> (AIR) CAN BE EXCLUDED.  
Fire Fighting Procedures:WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS.  
Unusual Fire/Explosion Hazard:DUST MAY PRESENT A FIRE HAZARD WHEN EXPOSED TO A STRONG IGNITION SOURCE AND MIXED WITH AIR.

## Accidental Release

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENTS. VENTILATE AREA. VACUUM OR DAMP DUST MOP. AVOID GENERATING DUST. WET WIPE AREA CLEAN. DO NOT DRY SWEEP. PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.  
Neutralizing Agent:NOT RELEVANT

## Handling

Handling and Storage Precautions:STORE IN A DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN.  
Other Precautions:AVOID INGESTION, INHALATION AND EXCESSIVE SKIN CONTACT. AVOID BREATHING OF FUMES OR DUST. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING AND DRINKING. REMOVE CONTAMINATED CLOTHING. LAUNDER BEFORE REUSE.

## Exposure Controls

Respiratory Protection:A NIOSH-APPROVED RESPIRATOR WITH FILTER CARTRIDGES APPROVED FOR DUST/FUMES/MISTS SHOULD BE WORN AT ALL TIMES DURING THE THERMAL SPRAY PROCESS. RESPIRATORS MAY ALSO BE WORN WHEN PRODUCT HANDLING GENERATES DUST.  
Ventilation:LOCAL EXHAUST VENTILATION SHOULD BE USED TO CONTROL EXPOSURE TO AIRBORNE FUMES OR DUST WHENEVER POSSIBLE.  
Protective Gloves:LATEX OR RUBBER  
Eye Protection:SAFETY GLASSES, FACE SHIELD OR GOGGLES  
Other Protective Equipment:EYE WASH STATION, SAFETY SHOWER, APRON AS REQUIRED  
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.  
Supplemental Safety and Health

## Chemical Properties

HCC:N1

NRC/State Lic Num:NOT RELEVANT  
Boiling Pt:B.P. Text:5200F,2871C  
Spec Gravity:14.0  
Viscosity:NOT RELEVANT  
Evaporation Rate & Reference:NOT RELEVANT  
Solubility in Water:INSOLUBLE  
Appearance and Odor:GRAY POWDER - NO ODOR

## Stability

Stability Indicator/Materials to Avoid:YES  
STRONG OXIDIZING AGENTS, STRONG ACIDS, HYDRAZINIUM NITRATE, AMMONIUM  
NITRATE, BROMINE PENTAFLUORIDE  
Stability Condition to Avoid:NONE  
Hazardous Decomposition Products:NONE

## Disposal

Waste Disposal Methods:EMPTY PRODUCT CONTAINERS, PROUCT WASTE AND  
CLEANING MEDIA SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL,  
STATE AND FEDERAL REGULATIONS. PREVENT WASTE FROM CONTAMINATING  
ENVIRONMENT.

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