

## **AI-1173**

### **MSDS Number**

BYGBM

### **National Stock Number**

3439-01-380-1803

### **Product Name**

AI-1173

### **Manufacturer**

MILLER THERMAL TECHNOLOGIES INC ALLOYS INTL DIV

### **Product Identification**

Product ID:AI-1173

MSDS Date:08/01/1991

FSC:3439

NIIN:01-380-1803

MSDS Number: BYGBM

### **Responsible Party**

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

1901 ELLIS SCHOOL ROAD

BAYTOWN , TX 77521-1215

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

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### **Ingredients**

TUNGSTEN CARBIDE

CAS: 12070-12-1

RTECS: YO7250000

Fraction By Weight: 83%

OSHA PEL5 MG W/M3

ACGIH TLV: 5 MG W/M3

COBALT (SARA 313)

CAS: 7440-48-4

RTECS: GF8750000

Fraction By Weight: 17%

OSHA PEL0.1 MG/M3

ACGIH TLV: 0.02 MG/M3; A3; 9495

## Hazards

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: INHALATION OF DUST OR FUMES MAY CAUSE SERIOUS RESPIRATORY IRRITATION; MAY CAUSE ASTHMA AND INTERSTITIAL FIBROSIS. CONTACT MAY CAUSE ALLERGIC SKIN REACTIONS OR EYE IRRITATION. CHRONIC: NONE SPECIFIED BY MANUFACTURER.  
Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.  
Effects of Overexposure:INHALED-COUGHING, SNEEZING, SHORTNESS OF BREATH. EYES-REDNESS, IRRITATION. SKIN-REDNESS, IRRITATION.  
INGESTED-NONE SPECIFIED BY MANUFACTURER.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

## First Aid

First Aid:INHALED-REMOVE FROM EXPOSURE. IF NEEDED, RESTORE BREATHING. SKIN/EYES-WASH THOROUGHLY WITH CLEAN WATER. CONTACT A PHYSICIAN IF IRRITATION OCCURS. INGESTED-IF CONSCIOUS, INDUCE VOMITING. GET MEDICAL ATTENTION.

## Fire Fighting

Extinguishing Media:WATER FOG, CARBON DIOXIDE, DRY CHEMICAL. NITROGEN OR OTHER INERT GAS WHEN IN CONFINED AREA WHERE O<sub>2</sub> CAN BE EXCLUDED.  
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.  
Unusual Fire/Explosion Hazard:METAL CARBIDE/COBALT DUST MAY PRESENT A FIRE HAZARD UNDER FAVORING CONDITIONS & STRONG IGNITION SOURCE.

## Accidental Release

Spill Release Procedures:USE CLEAN-UP METHODS WHICH AVOID CREATING DUST. VACUUM OR DAMP MOP. IF AIRBORNE DUST GENERATED, USE NIOSH/MSHA APPROVED RESPIRATOR WITH DUST CARTRIDGE. VENTILATE AREA OF SPILL.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

## Handling

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. AVOID DAMPNESS IN STORAGE.  
Other Precautions:MAINTAIN GOOD HOUSEKEEPING PROCEDURES TO PREVENT ACCUMULATION OF DUST. NO EATING, DRINKING OR SMOKING IN WORK OR STORAGE AREAS. AVOID INGESTION, INHALATION OR SKIN CONTACT.

## Exposure Controls

Respiratory Protection:IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED RESPIRATOR OR AN AIR-SUPPLIED RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910.134 AND MANUFACTURER'S RECOMMENDATIONS.  
Ventilation:USE ADEQUATE MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV(S).  
Protective Gloves:WORK GLOVES.  
Eye Protection:SAFETY GLASSES OR FACESHIELD OR GOGGLES.  
Other Protective Equipment:FIRE-RESISTANT CLOTHES AROUND SPARK GENERATOR. PROTECTIVE WORK CLOTHES-APRON, COVERALLS. DLA-HMIS: EYE WASH AVAILABLE.  
Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.  
Supplemental Safety and Health

## Chemical Properties

HCC:N1  
Boiling Pt:B.P. Text:5200F,2871C  
Vapor Density:0.570#/IN3  
Spec Gravity:13.9  
Solubility in Water:INSOLUBLE  
Appearance and Odor:GRAY POWDER; ODORLESS.

## Stability

Stability Indicator/Materials to Avoid: YES

STRONG OXIDIZING AGENTS, STRONG MINERAL ACIDS, ACETYLENE, HYDRAZINIUM NITRATE, AMMONIUM NITRATE, BROMINE PENTAFLUORIDE.

Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products: NONE.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

## Disposal

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS.

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