

MILLER THERMAL TECHNOLOGIES,INC.,ALLOYS INTL. DIV. -- AI-1002-B WELDING POWDER --
3439-00-235-8202

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===== Product Identification =====

Product ID:AI-1002-B WELDING POWDER

MSDS Date:12/21/1988

FSC:3439

NIIN:00-235-8202

MSDS Number: BDLQC

=== Responsible Party ===

Company Name:MILLER THERMAL TECHNOLOGIES,INC.,ALLOYS INTL. DIV.

Address:1901 ELLIS SCHOOL ROAD

City:BAYTOWN

State:TX

ZIP:77521-1215

Cou

ntry:US

Info Phone Num:713-426-5535

Emergency Phone Num:713-426-5535

CAGE:06677

=== Contractor Identification ===

Company Name:MILLER THERMAL TECHNOLOGIES,INC.,ALLOYS INTL. DIV.

Address:1901 ELLIS SCHOOL ROAD

Box:City:BAYTOWN

State:TX

ZIP:77521-1215

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===== Composition/Information on Ingredients =====

Ingred Name:TUNGSTEN CARBIDE

CAS:12070-12-1

RTECS #:YO7250000

Fraction by Wt: 89%

Other REC Limits:NONE SPECIFIED

OSHA PEL:5 MG W/M3

ACGIH

TLV:5 MG W/M3

Ingred Name:COBALT (SARA III)
CAS:7440-48-4
RTECS #:GF8750000
Fraction by Wt: 11%
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1 MG/M3;AS CO
ACGIH TLV:0.05 MG/M3;DUST 9293

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===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:WELDING CONSUMABLES ARE NON-REACTIVE,
NON-FLAMMABLE, NON-EXPLOSIVE, AND ESSENTIALLY NON-HAZARDOU
S UNTIL
USED IN A WELDING OPERATION. WELDING HAZARDS INCLUDE INHALATION OF
FUMES, THERMAL BURNS, RADIAT ION BURNS AND ELECTRIC SHOCK.
Explanation of Carcinogenicity:THE PRODUCT CONTAINS NO INGREDIENT THAT
IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.
Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY CAUSE METAL FUME
FEVER RESULTING IN DIZZINESS, NAUSEA, FEVER AND/OR IRRITATION OF
NOSE, THROAT AND EYES. TOXIC GASES CAN BE FATAL. CHRONIC EXPOSURE
MAY LEAD TO TRANSIEN
T OR PERMINENT LUNG DAMAGE. SKIN CONTACTMEY
CAUSE DERMITITIS IN SOME SENSITIVE PEOPLE.
Medical Cond Aggravated by Exposure:PRE-EXISTING RESPIRATORY
DISFUNCTION MAY BE AGGRAVATED BY FUME INHALATION.

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===== First Aid Measures =====

First Aid:FUME INHALATION:REMOVE FROM EXPOSURE. GET MEDICAL ATTENTION.
THERMAL BURN:USE NORMAL FIRST AID. ULTRAVIOLET EXPOSURE:SKIN;TREAT
AS SUNBURN. EYE; GET MEDICAL ATTENTION. ELECTRIC SHOCK:TURN OFF
POWER.
R EMOVE AND RESTORE BREATHING IF NECESSARY. GET MEDICAL
ATTENTION. INGESTION OF POWDER:INDUCE VOMITING, GET MEDICAL
ATTENTION.

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===== Fire Fighting Measures =====

Flash Point:NON-FLAMMABLE
Extinguishing Media:PRODUCT IS PRACTICALLY NON- FLAMMABLE. USE DRY
POWDER, WATER, CARBON DIOXIDE.
Fire Fighting Procedures:FIRE FIGHTERS 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:THIS POWDER MAY PRESENT A FIRE HAZARD UNDER FAVORABLE CONDITIONS AND A STRONG IGNITION SOURCE.

===== Accidental Release Measures =====

Spill Release Procedures:CLEAN UP ANY DUST OR WASTE RESIDUES BY PROCEDURES WHICH AVOID DUST. PLACE IN APPROVED CONTAINERS. AVOID INHALATION AND SKIN EXPOSURE.

Neutralizing Agent:NOT RELEVANT

===== Handling and Storage =====

Handling and Storage Precautions:NO SPECIAL HANDLING IS REQUIRED. STORE AS DIRECTED BY MFR.

Other Precautions:SEE ANSI STANDARD Z49.1-1983. READ "SAFETY IN WELDING AND CUTTING" FROM AMERICAN WELDING ASSOCIATION, 550 N.W. JEUNE RD., MIAMI,FL 33135.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH/MSHA 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 PEL/TLV.

Ventilation:USE LOCAL 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 APPR.GOGGLES/FACE SH'LD W/ANSI LENS

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

Work Hygienic Practices:USE GOOD INDUSTRIAL HYGIENE. WASH THOROUGHLY BEFORE EATING OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

NOTE: MFR'S LABEL IS GENERIC COVERING SEVERAL MATERIALS. THIS MATERIAL POSES NO CANCER HAZARD. 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.

===== Physical/Chemical Properties =====

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HCC:N1
Boiling Pt:B.P. Text:5200F,2871C
Melt/Freeze Pt:M.P/F.P Text:2700F,1482C
Spec Gravity:POWDER
pH:NONE
Solubility in Water:NEGLIGIBLE
Appearance and Odor:GRAY/BLACK POWDER, NO ODOR
Percent Volatiles by Volume:NONE

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
STRONG ACIDS AND/OR STRONG OXIDIZING AGENTS
Stability Condition to Avoid:NONE
Hazardous Decomposition Products:WELDING AND CUTTING OPERATION MAY

PRODUCE OXIDES OF THE METALS.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE I/A/W FEDERAL, STATE & LOCAL
REGULATIONS. RECLAIM METALS IF APPROPRIATE.

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