

CABOT CORP ALUMINUM MASTER ALLOY BUSINESS UNIT -- HIGH PERFORMANCE ALLOY  
188(1880) -- 3439-00-606-5425

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

Product ID:HIGH PERFORMANCE ALLOY 188(1880)

MSDS Date:11/01/1985

FSC:3439

NIIN:00-606-5425

MSDS Number: BPFYM

=== Responsible Party ===

Company Name:CABOT CORP ALUMINUM MASTER ALLOY BUSINESS UNIT

Address:601 PENN ST

Box:1296

City:READING

State:PA

ZIP:19601

Coun

try:US

Info Phone Num:215-921-5000

Emergency Phone Num:215-921-5000,CHEMTREC 800-424-9300

Preparer's Name:W.J. HETRICK

CAGE:70787

=== Contractor Identification ===

Company Name:ASTROLITE ALLOYS DIV OF ASTRO METALLUGICAL

Address:709 VIA ALONDRA

Box:City:CAMARILLO

State:CA

ZIP:93010-8714

Country:US

Phone:805-484-3621

CAGE:2R602

Company Name:CABOT CORP ALUMINUM MASTER ALLOY BUSINESS UNIT

Address:601 PENN ST

Box:1296

City:READING

State:PA

ZIP:19601

Country:US

Phone:215-921-5000,CHEMTREC 800-424-9300

CAGE:70787

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Composition/Information on Ingredients  
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Ingred Name:NICKEL (SARA III)  
CAS:7440-02-0  
RTECS #:QR5950000  
Fraction by Wt: 22%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9192

Ingred Name:COBALT (SARA III)  
CAS:7440-48-4  
RTECS #:GF8750000  
Fraction by Wt: 39%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:0.1 MG/M3;AS CO  
ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:CHROMIUM (SARA III)  
CAS:7440-47-3  
RTECS #:GB4200000  
Fraction by Wt: 22%  
Other  
REC Limits:NONE SPECIFIED  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3; 9192  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:TUNGSTEN  
CAS:7440-33-7  
RTECS #:YO7175000  
Fraction by Wt: 14%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:5 MG/M3/ 10 STEL  
ACGIH TLV:5 MG/M3/10 STEL;9192

Ingred Name:IRON OXIDE  
CAS:1309-37-1  
RTECS #:NO7400000  
Fraction by Wt: 3.0%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:10 MG/M3 (FE)  
ACGIH TLV:5 MG/M3(FE),B2; 9293

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fraction by Wt: 0.

35%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 1.25%  
Other REC Limits:1 MG/M3 FUMES  
OSHA PEL:(C) 5 MG/M3 DUST  
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:LANTHANUM  
CAS:7439-91-0  
Fraction by Wt: 0.07%  
Other REC Limits:NONE SPECIFIED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:SHORT TERM EXPOSURE TO WELDING FUMES, GASES OR DUST MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. LONG TERM EXPOSURE TO FUMES/GASES/DUST MAY CAUSE PULMONARY IRRITATION OR PNEUMOCONIOSIS; & SIDEROSIS FROM IRON FUMES.

Explanation of Carcinogenicity:NICKEL AND CHROMIUM ARE LISTED UNDER IARC AND NTP.

Effects

Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. WATERY EYES, HEADACHE, BREATHING DIFFICULTY, FREQUENT COUGHING AND/OR CHEST PAINS MAY OCCUR FROM ACUTE EXPOSURE. TOXIC GASES CAN BE FATAL.

Medical Conditions Aggravated by Exposure:INDIVIDUALS WITH IMPAIRED PULMONARY FUNCTION OR ILLNESS MAY HAVE SYMPTOMS EXACERBATED BY IRRITANTS  
CONT

AINED IN WELDING FUMES.

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

First Aid:IN CASE OF ELECTRICAL SHOCK, TURN OFF POWER PRIOR TO REMOVAL FROM EXPOSURE AREA AND ADMINISTRATION OF FIRST AID. REMOVE FROM EXPOSURE AREA AND CALL FOR MEDICAL AID. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT. IF NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF NO DETECTABLE PULSE, BEGIN EXTERNAL HEART MASSAGE. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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

Extinguishing Media:NON-COMBUSTIBLE. FOR SURROUNDING FIRES, 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. CONTAIN RUNOFF.

Unusual Fire/Explosion Hazard:WELDING OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

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

Spill Release Procedures:PICK UP RODS, CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES AND PLACE IN SUITABLE CONTAINERS FOR DISPOSAL. WEAR DUST MASK AND GLOVES DURING CLEAN UP.

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

Handling and Storage Precautions:WEAR GLOVES AND FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Other Precautions:PROVIDE PROTECTIVE SCREENS TO SHIELD OTHERS. WHEN ELECTRODES AND FLUXES ARE CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS GENERATED ARE DIFFERENT IN FORM FROM THE INGREDIENTS LISTED. NEW COMPOUNDS NOT IN THE ELECTRODES MAY FORM.

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

Respiratory Protection:USE WELD FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENER

AL VENTILATION DOES NOT KEEP EXPOSURE

BELOW RECOMMENDED LIMITS. USE ONLY NIOSH APPROVED RESPIRATORS.

Ventilation:USE ENOUGH VENTILATION WHEN CUTTING, GRINDING OR WELDING TO  
KEEP THE DUST, FUMES & GASES FROM THE WORKERS BREATHING ZONE

Protective Gloves:FLAMEPROOF GAUNTLER GLOVES

Eye Protection:OSHA APPROVED GOGGLES/FACE SHIELD W/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:WASH THOROUGHLY BEFORE EATING OR SMOKING.  
LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

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. OTHER INFLUENCING FACTORS ARE THE PRESENCE OF  
CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:2375F,1302C

Solubility in Water:INSOLUBLE

Appearance and Odor:ROD SHAPED

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

Stability Indicator/Materials to Avoid:YES

STRONG ACIDS & ALKALIES.

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:WELDING/CUTTING OPERATIONS MAY INCLUDE  
ELEMENTAL METALS, OXIDES OF THE METALS, FUMES/GASES &  
ELECTROMAGNETIC RADIATION.

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

Waste Disposal Methods:DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS

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