

AMPCO METAL INC -- COPPER BASE ALLOY BARE WELDING RODS & WIRE AMPCO-TRODE #46 --  
3439-01-022-0307

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

Product ID:COPPER BASE ALLOY BARE WELDING RODS & WIRE AMPCO-TRODE #46

MSDS Date:12/01/1994

FSC:3439

NIIN:01-022-0307

MSDS Number: BXGZP

=== Responsible Party ===

Company Name:AMPCO METAL INC

Address:1745 S 38TH ST

Box:2004

City:MILWAUKEE

State:WI

ZIP:53201-2004

Coun

try:US

Info Phone Num:414-645-3750 / FAX 414-645-3225

Emergency Phone Num:414-645-3750

CAGE:03306

=== Contractor Identification ===

Company Name:AMPCO METAL INC

Address:1745 S 38TH ST

Box:2004

City:MILWAUKEE

State:WI

ZIP:53201-2004

Country:US

Phone:414-645-3750

CAGE:03306

Company Name:WHEELER BROTHERS INC

Address:INDUSTRIAL PARK, DRUM AVE

Box:737

City:SOMERSET

State:PA

ZIP:15501-2136

Country:US

Phone:814-445-9641

CAGE:2B144

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

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ingred Name:ALUMINUM (SARA 313)  
CAS:7429-90-5  
RTECS #:BD0330000  
Fraction by Wt: 0-20%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 DUST  
ACGIH TLV:10 MG/M3 DUST; 9495

ingred Name:CHROMIUM (SARA 313) (CERCLA)  
CAS:7440-47-3  
RTECS #:GB4200000  
Fraction by Wt: 0-2%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3; 9495  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

ingred Name:COBALT (SARA 313)  
CAS:7440-48-4  
RTECS #:GF8750000  
Fraction by Wt: 0-3%  
Other REC Limits:NONE RECOMMENDED  
OSHA  
PEL:0.1 MG/M3  
ACGIH TLV:0.02 MG/M3; A3; 9495

ingred Name:COPPER (SARA 313) (CERCLA)  
CAS:7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 50-100%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2 MG/M3 FUME; 9495  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: 0-6%  
Other REC Limits:NONE RECOMMENDED

ingred Name:LEAD (SARA 313) (CERCLA)  
CAS:7439-92-1  
RTECS #:OF7525000  
Fraction by Wt: 0-3%  
Other REC Limits:NONE REC

OMMENDED  
OSHA PEL:SEE 1910.1025  
ACGIH TLV:0.15MG/M3 DUST; 9495  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:MANGANESE (SARA 313)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 0-14%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:C 5 MG/M3 DUST  
ACGIH TLV:5 MG/M3 DUST 9495

Ingred Name:NICKEL (SARA 313) (CERCLA)  
CAS:7440-02-0  
RTECS #:QR5950000  
Fraction by Wt: 0-32%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9495

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fractio  
n by Wt: 0-4%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9495

Ingred Name:TIN  
CAS:7440-31-5  
RTECS #:XP7320000  
Fraction by Wt: 0-20%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:2 MG/M3  
ACGIH TLV:2 MG/M3; 9495

Ingred Name:ZINC (SARA 313) (CERCLA)  
CAS:7440-66-6  
RTECS #:ZG8600000  
Fraction by Wt: 0-42%  
Other REC Limits:NONE RECOMMENDED  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:ZIRCONIUM  
CAS:7440-67-7  
RTECS #:ZH7070000  
Fraction by Wt: 0-0.5%  
Other

REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3/10 STEL;9495

Ingrd Name:PER MSDS:ELEMENTS W/LISTED % >0 WILL BE PRESENT IN ALL ALLOY GRD;THOSE STARTING W/0 MAY NOT BE PRESENT IN CERTAIN GRD.

RTECS #:9999999ZZ

Other REC Limits:NONE RECOMMENDED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:NO CHEM HAZ FROM

THESE ALLOY GRADES IN

SOLID FORM.MACHINE/GRIND/FLAME-CUTT/WELD OF ALLOY PROD WILL PUT  
CONTAMIN IN AIR.CU:IRRIT NOSE/THROAT,METAL FUME

FEVER,ANEMIA,EYE/SKIN IRRIT,WILSON DISEASE.MN:EFF ECTS CNS.AL:PULM  
FIBROSIS,ALZHEIMER

DISEASE.CR:ALLERGENS,DERM.CO:IRRIT.FE:SIDEROSIS.PB:POISON,KIDNEY  
DMG,CNS.(SUPPLEMEN)

Explanation of Carcinogenicity:PER MSDS:CHROMIUM, LEAD & NICKEL HAVE  
BEEN IDENTIFIED AS POTENTIAL HUMAN CARCINOGENS.

Effects of Overexposure:IRRIT NOSE/THROAT/SKIN/EY

E.METAL FUME FEVER

RESEMBLES FLU.ANEMIA.MN:APATHY,LOSS OF APPETITE,UNCONTROLLED  
LAUGHTER,INSOMNIA FOLLOWED BY SLIEEPINESS,HEAD,LEG CRAMPS,SPEECH  
DISTURBANCES,MASK-LIKE FACIAL APPEARANCE,CLUMSY MOVEMENT,DIFFICULT  
WALKING,FREQUENT FALLING,TREMORS,SALIVATION,SWEATING,MENTAL  
DETACHMENT.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYE:FLUSH WELL W/RUNNING WATER TO REMOVE PARTI  
CULATE.GET MED

ATTN. SKIN:VACUUM OFF EXCESS DUST.WASH WELL W/SOAP/WATER.AVOID  
BLOWING PARTICULATE INTO ATM.CONTACT W/ALLOY GRADES IN MOLTEN  
CONDITON WILL CAUSE SEVERE BURNS.GET MED ATTN. INHAL:REMOVE TO  
FRESH AIR.GET MED ATTN. INGEST:SEEK MED ATTN IF LG QUANT OF MATL  
HAVE BEEN INGESTED.

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

Extinguishing Media:SOLID MASSIVE FORM-USE APPROPR METHOD FOR  
SURROUNDING FIRE.CHIPS/FINE TURN/DUST-WATERSPRAY,CLASS

D, DRY  
SAND.(SUPPLEMENT)

Fire Fighting Procedures:DO NOT USE HALOGENATED AGENTS ON SMAL CHIPS OR FINES.

Unusual Fire/Explosion Hazard:DUST CLOUDS FROM FINE TURNING/DUST/SMALL CHIPS MAY BE EXPLOSIVE.PREVENT FORMATION OF DUST CLOUD.MOLTEN METAL ALLOYS MAY EXPLO ON WATER CONTACT.RX VIOLENTLY(SUP)

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

Spill Release Procedures:NO HAZ FROM THESE ALLOY GRADES IN SOLID FORM.VACUUM/SWEEP MATL & PLACE IN DISPOSAL CONTAINER.WEAR

PROTECTIVE GLOVES TO AVOID CUTS FROM BURRS OR SHARP EDGES WHEN HANDLING LARGER PIECES FOR DISPOSAL.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:NO SPECIAL PRECAUTIONS ARE NECESSARY FOR BULK MATLS.STORE MATL AWAY FROM INCOMPATIBLE MATLS.KEEP DUST/FINES AWAY FROM IGN SOURCES.

Other Precautions:HI PRODUCTION MACHINE/GRIND/WELD OPERATIONS,ETC FREQUENTLY REQUIRED

LOCAL EXHAUST VENTILATION.IF VENTILATION NOT ADEQUATE WEAR NIOSH

APPROVED DUST/FUME RESPIRATOR.GRINDING/CASTING UNCLEANED/CONTAIN EMBEDDED SAND MAY GENERATE SIGNIFICANT AMOUNTS OF DUST WITH FREE SILICA.

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

Respiratory Protection:IF EXPOSURE ABOVE PEL/TLV NIOSH APPROVED RESPIRATOR FOR FUME/DUST DEPENDENT UPON THE SOURCE OF AIRBORNE CONTAMINANT.

Ventilation:MECHANICAL(GENERAL)/LOCAL EXHAUST/VENTILATION:REQUIRED IF DUST OR FUME CREATED IN HANDLING OR WORKING ON THIS MATERIAL.

Protective Gloves:REQUIRED. SELECT IAW SPECIFIC OPERATION.

Eye Protection:SAFETY GLASS WITH SIDESHIELDS.SELECT IAW OPERATIONAL

Other Protective Equipment:LEATHER/EQUAL PROTECTIVE GLOVES/BODY CLOTH FOR WELD.APPROPRIATE PROTECTIVE EQUIPMENT/CLOTH FOR MELT/GRIND/CUT/WELD OPERATIONS.EARMUFFS/PLUGS

Work Hygienic Practices:ALWAYS EVALUATE OPERATIONS DONE ON PRODUCT IAW OSHA/RELEVANT STATE/FED/LOCAL STANDARDS.

Supplemental Safety and Health

FIRE EXTINGUISHING MEDIA:DO NOT USE HALOGENATED AGENTS ON SMALL CHIPS/FINE.

FI

RE/EXPLO HAZ:W/WATER/RUST/CERTAIN OTHER METAL OXIDES(E.G. OXIDES OF COPPER,IRON,LEAD). CONDITIONS TO AVOID:LITHIUM/HALOGENATED CMPDS. H EALTH HAZ:NI:ALLERGIC DERM(NI ITCH).SI:PNEUMOCONIOSIS,RESP PROBLEMS.SN:STANNOSIS.ZN:METAL FUME FEVER.

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:1600F,871C

Spec Gravity:8.1-8.9

Solubility in Water:INSOLUBLE.

Appearance and Odor:SLIVER/GREY,YELLOW OR REDDISH COLR W/NO ODOR.

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

Stability Indicator/Materials to Avoid:YES

AVOID ACIDS, BASES AND OXIDIZERS.

Stability Condition to Avoid:MOLTEN METAL MAY RX VIOLENTLY

W/WATER.AVOID FINELY DIVIDED MATL CONTACTING

HEAT/OXIDIZERS/ACIDS/ALKALIES/MOLTEN (SUPPP)

Hazardous Decomposition Products:METAL FUME.

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

Waste Disposal Methods:ARE RECYCLEABLE.VALUE OF SOLID/TURNINGS/ETC WILL BE INCREASED WHEN SE

GREGATED BY ALLOY GRADE.RECYCLING IS

RECOMMENDED.ANSY DISPOSAL PRACTICE MUST BE IN COMPLIANCE

W/LOC/STATE/FED LAWS/REGS(CONTACT LO CAL/STATE ENVRIO AGENCY FOR SPECIFIC RULES).

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