Product ID:COPPER BASED ALLOY BARE WELDING RODS & WIRE MSDS Date:12/15/1986 FSC:3439 NIIN:00-902-4211 **MSDS Number: BJFDY** === Responsible Party === Company Name: AMPCO METAL INC Address:1745 S 38TH ST Box:2004 City:MILWAUKEE State:WI ZIP:53201-2004 Country:US Info Phone Num:414-645-3750 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

Ingred Name:ALUMINUM (SARA III) CAS:7429-90-5 RTECS #:BD0330000 Fraction by Wt: 0 - 20% Other REC Limits:NONE SPECIFIED OSHA PEL:15MG/M3 DUST/5 FUME ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:COBALT (SARA

III) CAS:7440-48-4 RTECS #:GF8750000 Fraction by Wt: >1% Other REC Limits:NONE SPECIFIED OSHA PEL:0.1 MG/M3;AS CO ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:COPPER (SARA III) CAS:7440-50-8 RTECS #:GL5325000 Fraction by Wt: 50-100% Other REC Limits:NONE SPECIFIED OSHA PEL:0.1MG/M3 FUME/1 DUST ACGIH TLV:0.2MG/M3 FUME; 9192 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:IRON OXIDE CAS:1309-37-1 RTECS #:NO7400000 Fraction by Wt: 0 - 6% Other REC Limits:NONE SPECIFIED OSHA PEL:10 MG/M3 (FE) ACGIH TLV:5 MG/M3(FE),B2; 9293

Ingred Name:MANGANESE (SARA III) CAS:7439-96-5 RTECS #:OO9275000 Fraction by Wt: >1% Other REC Limits:NONE SPECIFIED OSHA PEL:(C) 5 MG/M3 DUST ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:NICKEL (SARA III) CAS:7440-02-0 RTECS #:QR5950000 Fraction by Wt: 0 - 30% Other REC Limits:NONE SPECIFIED OSHA PEL:1 MG/M3 ACGIH TLV:1 MG/M3; 9192

Ingred Name:SILICON CAS:7440-21-3 RTECS #:VW0400000 Fraction by Wt: >1% Other REC Limits:NONE SPECIFIED OSHA PEL:15 MG/M3 TDUST ACGI Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:ACUTE-EYES:IRRITATION. SKIN:ALLERGIC DERMAITITIS. INHALATION:METAL FUME FEVER. INGESTION:IRRITATION. CHRONIC-EYES:IRRITATION. SKIN:DERMATITIS, KERATINIZATION OF THE HANDS AND FEET. INHALATION:IRRITATI ON TO THE UPPER RESPIRATORY TRACT, BEN

IGN PNEUMOCONIOSIS. INGESTION:IRRITATION AND POISONING. Explanation of Carcinogenicity:NICKEL(0-32%) MAY REASONABLY BE

ANTICIPATED TO BE CARCINOGENIC BY NTP AND IARC. Effects of Overexposure:EYES:IRRITATION. SKIN:DISCOLORATION AND ITCHING. INHALATION:FLU-LIKE SYMPTOMS. INGESTION:IRRITATION

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

First Aid:EYE:FLUSH WELL WITH RUNNING WATER TO REMOVE PARTICUL ATE. GET

MEDICAL ATTENTION. SKIN:VACUUM OFF EXCESS DUST. WASH WELL WITH SOAP AND WATER. AVOID BLOWING PARTICULATE INTO THE ATMOSPHERE. INHALATION:RE MOVE TO FRESH AIR. GET MEDICAL ATTENTION. INGESTION:SEEK MEDICAL ATTENTION IF LARGE QUANTITIES OF MATERIAL HAVE BEEN INGESTED (NOT LIKELY IN THE PRODUCT STATE AS SOLD).

Extinguishing Media:USE CLASS D EXTINGUISHING AGENTS OR DRY SAND ON FIRES.

Fire Fightin

g Procedures:THE SOLID FORM IS NOT COMBUSTIBLE UNDER NORMAL CONDITIONS. USE FIRE FIGHTING METHODS APPROPRIATE FOR SURROUNDING AREAS.

Unusual Fire/Explosion Hazard: FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS METAL FUMES.

Spill Release Procedures:NO SPECIAL PRECAUTIONS ARE NECESSARY FOR SPILLS OF BULK MATERIAL. Neutralizing Agent:NONE

Handling and Storage Precautions:STORE MATERIAL AWAY FROM INCOMPATIBLE MATERIALS AND KEEP DUST FROM SOURCES OF IGNITION. Other Precautions:NONE

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

Respiratory Protection: IF EXPOSURE ABOVE THE PEL OR TLV, USE NIOSH APPROVED RESPIRATOR FOR FUMES AND DUST, DEPENDENT UPON THE SOURCE OF AIRBORNE CONTAMINANT.

Ventilation:REQUIRED IF DUST OR FUMES ARE CREATED IN HANDLING OR WORKING ON THIS MATERIAL.

Protective Gloves

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:USE LEATHER OR OTHER PROTECTIVE GLOVES.

Eye Protection: GLASSES REQUIRED FOR WELDING OPERATIONS.

Other Protective Equipment: BODY CLOTHING WHILE WELDING.

Work Hygienic Practices: USE EAR MUFFS OR PLUGS IF NOISE LEVEL IS ABOVE 90 DECIBELS.

Supplemental Safety and Health

THE USE OF THESE WELDING RODS MAY CREATE FUMES IN THE BREATHING ZONES OF WORKERS. BE CERTAIN TO EVALUATE THE LEVELS OF METAL FUMES FOR THESE WORKERS AND ALWAYS USE APPROVED (NIOSH) RESPIRATORS WHERE N ECESSARY.

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HCC:N1

Solubility in Water:INSOLUBLE Appearance and Odor:SILVER/GREY, YELLOW OR REDDISH COLOR

Stability Indicator/Materials to Avoid:YES ACIDS, BASES, AND OXIDIZERS. Stability Condition to Avoid:MOLTEN METAL MAY REACT VIOLENTLY WITH WATER. AVOID CONTACT OF FINELY DIVIDED MATERIAL WITH HEAT,OXIDIZERS,ACIDS,ALKALIES Hazardous Decomposition Products:METAL F UMES.

Waste Disposal Methods:FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS CONCERNING THE DISPOSAL OF WASTE. CLEANUP PERSONNEL SHOULD WEAR RESPIRATORS AND PROTECTIVE CLOTHING.

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