Product ID:HQA/5556 ALUMINUM WELDING WIRE & ROD MSDS Date:03/15/1993 FSC:3439 NIIN:00-803-9500 MSDS Number: CFYXY === Responsible Party === Company Name: HIGH QAULITY ALLOYS Address:12329 TELEGRAPH ROAD City:SANTA FE SPRINGS State:CA ZIP:90670 Country:US Info Phone Num:310-941-3264 Emergency Phone Num:310-941-3264 Preparer's Name:MARK A. COMSTOCK С AGE:KO878 === Contractor Identification === Company Name: HIGH QAULITY ALLOYS Address:12329 TELEGRAPH ROAD Box:City:SANTA FE SPRINGS State:CA ZIP:90670 Country:US Phone:310-941-3264 CAGE:KO878 Company Name: HIGH QUALITY ALLOYS Address:12328 TELEGRAPH RD Box:City:SANTA FE SPRINGS State:CA ZIP:80670 Country:US Phone:213-841-3264 CAGE:2Z398

Ingred Name:IRON (FE) CAS:7439-89-6 RTECS #:NO4565500 Fraction by Wt: 0.04% Other REC Limit s:NONE RECOMMENDED

Ingred Name:COPPER (SARA 313) (CERCLA) (CU) CAS:7440-50-8 RTECS #:GL5325000 Fraction by Wt: 0.10% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.1MG/M3 FUME/1 DUST ACGIH TLV:0.2 MG/M3 FUME; 9596 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:MANGANESE (SARA 313) (MN) CAS:7439-96-5 RTECS #:OO9275000 Fraction by Wt: 1.0% Other REC Limits:NONE RECOMMENDED OSHA PEL:C, 5 MG/M3 (FUME) ACGIH TLV:0.2 MG/M3; 9596

Ingred Name:SILICON (SI) CAS:7440-21-3 RTECS #:VW0400000 Fraction by Wt: 0.25% Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 TDUST ACGIH TLV:10 MG/M3 TDUST; 9596

Ingred Name:CHROMIUM (SARA 313) (CERCLA) (CR) CAS:7440-47-3 RTECS #:GB4200000 Fraction by Wt: 0.20% Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG/M3 ACGIH TLV:0.5 MG/M3; 9596 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:MAGNESIUM OXIDE (MG) CAS:1309-48-4 RTECS #:OM3850000 Fraction by Wt: 5.5% Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 PARTICULATE ACGIH TLV:10 MG/M3; FUME; 9596

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gred Name:TITANIUM (TI) CAS:7440-32-6 RTECS #:XR1700000 Fraction by Wt: 0.20% Other REC Limits:NONE RECOMMENDED

Ingred Name:ZINC OXIDE (SARA 313) (CERCLA) (ZN) CAS:1314-13-2 RTECS #:ZH4810000 Fraction by Wt: 0.25% Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 TDUST ACGIH TLV:10 MG/M3 TDUST; 9596

Ingred Name:ALUMINUM (SARA 313) (AL) CAS:7429-90-5 RTECS #:BD0330000 Fraction by Wt: REMAINR Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 DUST ACGIH TLV:10 MG/M3 DUST; 9596

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO Health Hazards Acute and Chronic: EXPO TO DUST/WELDING FUME/GAS:SHORT-TERM-METALLIC TASTE, NAU, TIGHTNESS OF CHEST, FEVER, IRRIT EYE/NOSE/THROAT/SKIN, UNCONSC/DEATH DUE TO WELDING GAS/LACK OF OXY.LONG-TERM-ADVERSE EFFECTS FRM LONGTERM WELD FUME/GAS/DUST EXPO, SKIN SENS, NEUROLOGICAL DMG, RESP DISEASE(BRONCHIAL ASTHMA, LUNG FIBROSIS, PNEUMOCONOSIS). Explanation of Carcinogenicity: PER MSDS: CR MUST BE CONSIDERED POSSIBLE CARC UNDER OSHA, IARC. Effects of Overexposure: EXPO TO DUST/WELDING FUME/GAS:SHORT-TERM-METALLIC TASTE, NAU, TIGHTNESS OF CHEST, FEVER, IRRIT EYE/NOSE/THROAT/SKIN, UNCONSC/DEATH DUE TO WELDING GAS/LACK OF OXY.LONG-TERM-ADVERSE EFFECTS FRM LONGTERM WELD FUME/GAS/DUST EXPO, SKIN SENS, NEUROLOGICAL DMG, RESP DISEASE(BRONCHIAL ASTHMA,

LUNG FIBROSIS, PNEUMOCONOSIS). Medical Cond Aggravated by Exposure: AGGRAVATION OF PRE-EXISTING RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN OSME WORKERS.

First Aid:REMOVE FROM EXPO & OBRTAIN PROMPT MED ATTN.IF VICTIM IS UNCONSCIOUS ADMINISTER OXYGEN.IF NOT BREATING RESUSCITATE IMMED.

Flash Point:NON-FLAMMABLE Autoignition Temp:Autoignition Temp T ext:NP Lower Limits:NP Upper Limits:NP Extinguishing Media:NONE SPECIFIED BY MANUFACTURER. Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER. Unusual Fire/Explosion Hazard:WELDING ARC/SPARKS CAN IGNITE COMBUSTIBLES.REFER:AMER NAT STD Z49.1 FOR PREVENTION/PROTECTION INFO DURING USE OF WELDING/ALLED PROCEDURES.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage Precautions:READ/UNDERSTAND MFG
INSRUCTIONS/PRECAUT LABEL ON PROD.SEE AMER NAT STD Z49.1 & OSHA 29CFR1910 FOR MORE DETAIL INFO ON VENTI,RESP PROT,EYE/SKIN PROT.
Other Precautions:DETERMINE ACTUAL EXPO BY INDUSTRIAL HYG MONITORING.
AT MIN INCLUDE WELDERS GLOVES,PROTECTIVE FACESHIELD,MAY INCLUDE ARM PROTECTORS,APRONS,HATS,SHOULDER PROTECTION AS WELL AS DARK SUBSTANTIAL CLOTHING.

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

Respiratory Protection:USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED RESPIRATION WHEN WELDING IN CONFINED SPACE OR WHEN LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPO BELOW TLV.

Ventilation:USE ENOUGH VENTI,LOC EXHAU @ARC OR BOTH TO KEEP FUMES/GAS BELO TLV IN WORKER BREATH ZONE/GEN AREA.TRAIN WELD KEEP (SUPP) Protective Gloves:WELD GLOVES(MIN)

Eye Protection:HELMET,FCSHIELD W/FILT LENS SHADE #10/DK Other Protective Equipment:PROTECTIVE SCREEN/FALSH GOGG IF NECESSARY TO

Waste Disposal Methods:NONE SPECIFIED BY MANUFACTURER.

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ling agencies):

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