

HEFLIN STEEL COMPANY -- ALUMINUM ALLOYS -- 3439-00-178-8590

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

Product ID:ALUMINUM ALLOYS

MSDS Date:05/11/1987

FSC:3439

NIIN:00-178-8590

MSDS Number: BQXRT

=== Responsible Party ===

Company Name:HEFLIN STEEL COMPANY

Address:1111 W MARICOPA FREEWAY

Box:1249

City:PHOENIX

State:AZ

ZIP:85001

Country:US

Info Phone Num:602-252-8061

Emergency Phone Num:602-252-8061

CAGE

:9J432

=== Contractor Identification ===

Company Name:HEFLIN STEEL COMPANY

Address:1111 W MARICOPA FREEWAY

Box:1249

City:PHOENIX

State:AZ

ZIP:85001

Country:US

Phone:602-252-8061

CAGE:9J432

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

Ingred Name:ALUMINUM (SARA III)

CAS:7429-90-5

RTECS #:BD0330000

Fraction by Wt: 90-99.7%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15MG/M3 DUST/5 FUME

ACGIH TLV:10MG/M3 DUST; 9293

Ingred Name:COBALT (SARA III)

CAS:7440-48-4

RTECS #:GF87

50000  
Fraction by Wt: 1-10%  
Other REC Limits:NONE RECOMMENDED  
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: 1-10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2MG/M3 FUME; 9293  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:IRON OXIDE (FE2O3)  
CAS:1309-37-1  
RTECS #:NO7400000  
Fraction by Wt: 1-10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 MG/M3 (FE)  
ACGIH TLV:5 MG/M3  
(FE),B2; 9293

Ingred Name:LEAD (SARA III)  
CAS:7439-92-1  
RTECS #:OF7525000  
Fraction by Wt: 0.2-0.7%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.05 MG/M3;1910.1025  
ACGIH TLV:0.15 MG/M3;DUST 9293  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:MAGNESIUM OXIDE  
CAS:1309-48-4  
RTECS #:OM3850000  
Fraction by Wt: 1-10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 PARTICULATE  
ACGIH TLV:10 MG/M3;TDUST; 9293

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 1-10%  
Oth

er REC Limits:NONE RECOMMENDED  
OSHA PEL:(C) 5 MG/M3 DUST  
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fraction by Wt: 1-10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:TIN  
CAS:7440-31-5  
RTECS #:XP7320000  
Fraction by Wt: 1-10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:2 MG/M3  
ACGIH TLV:2 MG/M3; 9293

Ingred Name:ZINC OXIDE  
CAS:1314-13-2  
RTECS #:ZH4810000  
Fraction by Wt: 1-10%  
Other REC Limits:NONE RECOM  
MENED  
OSHA PEL:15MG/M3 TDUST/5 FUME  
ACGIH TLV:10MG/M3 TDUST; 9293

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

LD50 LC50 Mixture:TLV FOR WELDING FUMES IS 5 MG/M3  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: COPPER FUMES MAY CAUSE UPPER  
RESPIRATORY TRACT IRRITATION, NAUSEA, AND METAL FUME FEVER.  
CHRONIC: LEAD FUMES MAY CAUSE CENTRAL NERVOUS SYSTEM DISTURBANCES,

RENAL CHANGES, PERIPHERAL NEUROPATHY, GASTROINTESTINAL  
DISTURBANCES, ANEMIA,AND CHROMOSOMAL CHANGES.

Explanation of Carcinogenicity:NICKEL AND CHROMIUM IF PRESENT WILL BE  
ONLY IN TRACE AMOUNTS.

Effects of Overexposure:UPPER RESPIRATORY TRACT IRRITATION, NAUSEA,  
METAL FUME FEVER.

Medical Cond Aggravated by Exposure:PREEXISTING RESPIRATORY DISEASES  
MAY BE AGGRAVATED BY EXPOSURE TO THE DUST AND FUMES OF THIS  
PRODUCT.

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

=====

First Aid:INHALATION: REMOVE FROM EXPOSURE. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE CPR. IF NO DETECTABLE PULSE, GIVE HEART MASSAGE. EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SKIN: WASH WITH SOAP AND WATER. INGESTION: SEEK MEDICAL ATTENTION.

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

Extinguishing Media:USE CLASS D DRY POWDER EXTINGUISHING MATERIAL. DO NOT USE WATER OR HALOGEN ON DUST FIRES.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:DUST MAY IGNITE READILY. DAMP ALUMINUM DUST MAY HEAT SPONTANEOUSLY WITH LIBERATION OF HYDROGEN TO FORM EXPLOSIVE AIR MIXTURES.

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

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUE AND PLACE IN APPROPRIATE DISPOSAL CONTAINER. AVOID INHALATION AND SKIN EXPOSURE.

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

Handling and Storage Precautions:STORE IN DRY AREA. ELECTRODES EXPOSED TO MOISTURE MAY EXPLODE VIOLENTLY IF USED. DRY MOIST RODS BY BAKING AT 300F FOR TEN HOURS.

Other Precautions:TRAIN WELDER TO KEEP HIS HEAD OUT OF THE FUMES. MONITOR AIR TO ENSURE ACCEPTABLE EXPOSURES. AVOID ELECTRICAL SHOCK BY MAINTAINING DRY WORK AREA.

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

Respiratory Protection:FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR IN CONFINED SPACES OR WHERE VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:LOCAL EXHAUST TO KEEP BELOW TLV.

Protective Gloves:WELDER'S GLOVES.

Eye Protection:HELMET OR FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:SUBSTANTIAL DARK CLOTH, ARM PROTECTOR, APRON, HAT AND SHOULDER PROTECTION. AIR SAMPLING TO DETERMINE CORRECTIVE MEASURES

Work Hygienic Practices:WASH HANDS THOROUGHLY BEFORE EATING,

SMOKING OR  
USING SANITARY FACILITIES.

Supplemental Safety and Health  
NONE.

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:900F,482C

Spec Gravity:2.5-2.9

Solubility in Water:INSOLUBLE

Appearance and Odor:SOLID WITH SILVER METALLIC LUSTRE. ODORLESS.

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

Stability Indicator/Materials to Avoid:YES

REACTS WITH STRONG ACIDS AND SODIUM HYDROXIDE. AVOID BROMATES, IODATES,

AMMONIUM NITRATE AND STRONG OXIDIZERS.

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:FUMES OF METALS AND METAL OXIDES FROM  
ELECTRODE AND BASE METAL, CARBON MONOXIDE, CARBON DIOXIDE, OZONE,  
NITROGEN OXIDES.

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

Waste Disposal Methods:CONSULT WITH YOUR LOCAL ENVIRONMENTAL OFFICER.  
DISPOSE OF FUMES, FLUX OR WELD GRINDING RESIDUE FROM THE WORK AREA  
IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL ENVIRONMENTAL  
REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):  
This information is formulated for use by elements of the Department  
of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and  
disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to  
their  
particular situation.