

ALCOTEC WIRE CO SUB OF ALCOA WELD WIRE INC. -- 5356,ALUMINUM WELDING WIRE AND METALLIZING WIRE -- 3439-01-440-6693

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

Product ID:5356,ALUMINUM WELDING WIRE AND METALLIZING WIRE

MSDS Date:06/15/1999

FSC:3439

NIIN:01-440-6693

Status Code:A

MSDS Number: CKLVF

=== Responsible Party ===

Company Name:ALCOTEC WIRE CO SUB OF ALCOA WELD WIRE INC.

Address:2750 AERO PARK DR.

B

Box:1320

City:TRAVERSE CITY

State:MI

ZIP:49685

Country:US

Info Phone Num:616-941-4111 / 616-941-9154

Emergency Phone Num:717-637-8911

Preparer's Name:NOT PROVIDED

CAGE:7Z608

=== Contractor Identification ===

Company Name:ALCOTEC WIRE CO SUB OF ALCOA WELD WIRE INC.

Address:2750 AERO PARK DR.

Box:1320

City:TRAVERSE CITY

State:MI

ZIP:49686

Country:US

Phone:412-553-4649; 616-941-4111

CAGE:7Z608

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

Ingred Name:SILICON

CAS:7440-02-0

Co

de:F  
RTECS #:QR5950000  
= Wt:.25  
Other REC Limits:NOT PROVIDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
= Wt:.4  
Other REC Limits:NOT PROVIDED  
OSHA PEL:10 MG/M3 AS FE  
ACGIH TLV:5 MG/M3 AS FE

Ingred Name:COPPER  
CAS:7440-50-8  
RTECS #:GL5325000  
= Wt:.1  
Other REC Limits:NOT PROVIDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:MANGANESE  
CAS:7439-96-5  
RTECS #:OO9275000  
Minumum % Wt:.05  
Maxumum % Wt:.2  
Other REC Limits:NOT PROVIDED  
OSHA PEL:C5 MG/M3  
ACGIH TLV:5 MG/M3

Ingred Name:MAGNESIUM  
CAS:7439-95-4  
RTECS #:OM2100000  
Minumum % Wt:4.5  
Maxumum % Wt:5.5  
Other REC Limits:NOT PROVIDED  
OSHA PEL:15 MG/M3 (TDUST)  
ACGIH TLV:10 MG/M3 (TDUST)

Ingred Name:CHROMIUM  
CAS:7440-47-3  
RTECS #:GB4200000  
Minumum % Wt:.05  
Maxumum % Wt:.2  
Other REC Limits:NOT PROVIDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:ZINC  
CAS:7440-66-6  
RTECS #:ZG8600000  
= Wt:.1

D  
OSHA PEL:15 MG/M3 (TDUST)  
ACGIH TLV:10 MG/M3 (TDUST)  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:TITANIUM  
CAS:7440-32-6  
RTECS #:XR1700000  
Minumum % Wt:.08  
Maxumum % Wt:.2  
Other REC Limits:NOT PROVIDED  
OSHA PEL:15 MG/M3 (TDUST)  
ACGIH TLV:10 MG/M3 (TDUST)

Ingred Name:OTHERS EACH (BERYLLIUM SHALL NOT EXCEED 0.0008%)  
= Wt:.05  
Other REC Limits:NOT PROVIDED  
OSHA PEL:NOT PROVIDED  
ACGIH TLV:NOT PROVIDED

Ingred Name:OTHERS TOTAL  
= Wt:.15  
Other REC Limits:NOT PROVIDED  
OSHA PEL:NOT PROVIDED  
ACGIH TLV:NOT PROVIDED

Ingred Name:ALUMINUM  
CAS:7429-90-5  
RTECS #:BD0330000  
Fraction by Wt: REMAINDER  
Other REC Limits:NOT PROVIDED  
OSHA PEL:15 MG/M3  
ACGIH TLV:10 MG/M3

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

LD50 LC50 Mixture:NOT PROVIDED  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:POTENTIAL HEALTH EFFECTS: EYES: FUMES  
CAN CAUSE IRRITATION. ULTRAVIOLET RADIATION FROM WELDING CAN CAUSE  
FLASH BURNS. SKIN: CAN CA

USE IRRITATION. ULTRAVIOLET RADIATION CAN CAUSE FLASH BURNS. INHALATION: CAN CAUSE RESPIRATORY IRRITATION. WELDING FUMES ARE CARCINOGENIC. EXPOSURE TO OZONE CAN CAUSE NOSE, THROAT IRRITATION, CHEST TIGHTNESS, HEADACHE, SHORTNESS OF BREATH, COUGH, WHEEZE, NAUSEA, RESPIRATORY DISTRESS AND PULMONARY EDEMA. HEXAVALENT CHROMIUM CAN CAUSE ASTHMA, KIDNEY DAMAGE, SENSITIZATION DERMATITIS, SKIN ULCERATION. CHRONIC: CAN CAUSE NERVOUS SYSTEM DISORDER, PNEUMONITIS, FIBROSIS, BLOOD DISORDERS, FEVER, CHILLS.

Explanation of Carcinogenicity:HEXAVALENT CHROMIUM IS LISTED AS CARCINOGENIC BY IARC (GROUP 1). CHROMIUM AND SOME OF ITS COMPOUNDS ARE LISTED AS CARCINOGENIC BY THE NTP. HEXAVALENT CHROMIUM COMPOUNDS MAY BE GENERATED DURING WELDING OPERATIONS, WITH ALLOYS CONTAINING CHROMIUM.

Effects of Overexposure:POTENTIAL HEALTH EFFECTS: EYES: FUMES CAN CAUSE IRRITATION. ULTRAVIOLET RADIATION FROM WELDING CAN CAUSE FLASH BURNS. SKIN: CAN CAUSE IRRITATION.

N. ULTRAVIOLET RADIATION CAN CAUSE FLASH BURNS. INHALATION: CAN CAUSE RESPIRATORY IRRITATION. WELDING FUMES ARE CARCINOGENIC. EXPOSURE TO OZONE CAN CAUSE NOSE, THROAT IRRITATION, CHEST TIGHTNESS, HEADACHE, SHORTNESS OF BREATH, COUGH, WHEEZE, NAUSEA, RESPIRATORY DISTRESS AND PULMONARY EDEMA. HEXAVALENT CHROMIUM CAN CAUSE ASTHMA, KIDNEY DAMAGE, SENSITIZATION DERMATITIS, SKIN ULCERATION.

Medical Cond Aggravated by Exposure:CHRONIC LUNG DISEASE, SKIN RASHES, AND ASTHMA.

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

First Aid:EYES: FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CONSULT A PHYSICIAN. SKIN: WASH THOROUGHLY WITH SOAP AND WATER. CONSULT A PHYSICIAN IF IRRITATION PERSISTS. INHALATION: REMOVE TO FRESH AIR. CHECK FOR CLEAR AIRWAY, BREATHING, AND PRESENCE OF PULSE. PROVIDE CPR FOR PERSONS WITHOUT PULSE OR RESPIRATIONS. CALL A PHYSICIAN IMMEDIATELY.

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

Flash Point:NON-FLAMMABLE

Lower Limits:NOT PROVIDED

Upper Limits:NOT PROVIDED

Extinguishing Media:USE MATERIALS THAT ARE APPROPRIATE FOR SURROUNDING FIRE. USE COURSE WATER SPRAY ON CHIPS OR TURNINGS. FOR FINES, DUST OR MOLTEN ALUMINUM, USE CLASS D EXTINGUISHING AGENTS.

Fire Fighting Procedures:DO NOT USE HALOGENATED EXTINGUISHING AGENTS ON SMALL CHIPS/FINES. DO NOT USE WATER IN FIGHTING FIRES AROUND MOLTEN ALUMINUM. FIRE FIGHTERS SHOULD WEAR NIOSH APPROVED P

## SITIVE

PRESSURE SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING WHEN APPROPRIATE.

Unusual Fire/Explosion Hazard: DUSTS OR FINES DISPERSED IN THE AIR CAN BE EXPLOSIVE. CHIPS, FINES AND DUST IN CONTACT WITH WATER CAN GENERATE FLAMMABLE/EXPLOSIVE HYDROGEN GAS. THESE GASES COULD PRESENT AN EXPLOSION HAZARD IN CONFINED OR POORLY VENTILATED SPACES.

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

Spill Release Procedures: SMALL/LARGE SPILL:

IF MOLTEN: CONTAIN THE FLOW

USING DRY SAND OR SALT FLUX AS A DAM. DO NOT USE SHOVELS OR HAND TOOLS TO HALT THE FLOW OF MOLTEN ALUMINUM. ALLOW THE SPILL TO COOL BEFORE REMELTING AS SCRAP.

Neutralizing Agent: NOT RELEVANT

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

Handling and Storage Precautions: PRODUCT SHOULD BE KEPT DRY. AVOID GENERATING DUST. AVOID CONTACT WITH SHARP EDGES OR HEATED METAL. HOT AND COLD ALUMINUM ARE NOT VISUALLY DIFFERENT.

Other Pre

cautions: DO NOT ALLOW CHIPS, FINES OR DUST TO CONTACT WATER, PARTICULARLY IN ENCLOSED AREAS. AVOID ALL IGNITION SOURCES. GOOD HOUSEKEEPING PRACTICES MUST BE MAINTAINED. DROPS OF MOLTEN ALUMINUM IN WATER CAN GENERATE HYDROGEN GAS TO PRESENT AN EXPLOSION HAZARD.

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

Respiratory Protection: USE NIOSH-APPROVED RESPIRATORY PROTECTION [DUST, FUME, HIGH EFFICIENCY DUST/FUME MASK FOR LEAD, OR OTHER (ORGANIC VAPOR)] AS

SPECIFIED BY AN INDUSTRIAL HYGIENIST OR OTHER QUALIFIED PROFESSIONAL IF CONCENTRATIONS EXCEED THE EXPOSURE LIMITS.

Ventilation: USE WITH ADEQUATE EXPLOSION-PROOF VENTILATION TO MEET THE EXPOSURE LIMITS.

Protective Gloves: WEAR IMPERVIOUS GLOVES TO AVOID ANY SKIN INJURY.

Eye Protection: WELDERS SHOULD USE WELDER'S HELMET, FACE SHIELD, FILTER LENS.

Other Protective Equipment: WELDERS SHOULD USE APPROPRIATE EQUIPMENT (E.G. WELDER'S HELMET, FACE SHIELD, FILTER LENS) TO PREVENT EYE

IRRITATION OR FLASH BURNS.

Work Hygienic Practices:GOOD INDUSTRIAL HYGIENE PRACTICES, INCLUDING  
REDUCING OCCUPATIONAL EXPOSURES TO AS LOW AS REASONABLY ACHIEVABLE,  
ARE RECOMMENDED.

Supplemental Safety and Health

P/N: 5356AL. ALCOTEC PART NUMBER: 159493.

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

HCC:N1

NRC/State Lic Num:NOT RELEVANT

Melt/Freeze Pt:M.P/F.P Text:970-1215F

Decomp Temp:Decomp Text:NOT PROVIDED

Spec Gravity:2.768

Solubility in Water:NONE

Appearance

and Odor:ODORLESS SOLID

Corrosion Rate:NOT PROVIDED

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

Stability Indicator/Materials to Avoid:YES

WATER, STRONG OXIDIZERS, ACIDS AND ALKALIS, HALOGENATED COMPOUNDS, IRON  
OXIDE (RUST) AND OTHER METAL OXIDES (E.G., COPPER AND LEAD OXIDES),  
IRON POWDER.

Stability Condition to Avoid:STABLE UNDER NORMAL CONDITIONS OF USE,  
STORAGE, AND TRANSPORTATION AS SHIPPED. MOISTURE, HEAT

Hazardous Decomposition Products:NOT PROVIDED

===== Toxicological Information =====

Toxicological Information:SILICON: LD50 (ORAL, RAT) 3160 MG/KG.

MANGANESE: LD50 (ORAL, RAT) 9,000 MG/KG. IRON: INTRAPERITONEAL  
RABBIT LDL0: 20 MG/KG - NO TOXIC EFFECT NOTED.

===== Ecological Information =====

Ecological:NOT AVAILABLE

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

Waste Disposal Methods:COLLECT SCRAP FOR REMELTING AND RECYCLING. TO  
MAINTAIN

METAL PURITY, IT MAY BE DESIRABLE TO SEGREGATE THIS SCRAP FROM OTHER ALLOYS. RCRA STATUS: CHARACTERIZE IN ACCORDANCE WITH 40 CFR 261 OR STATE EQ UIVALENT.

===== MSDS Transport Information =====

Transport Information:NOT REGULATED.

===== Regulatory Information =====

SARA Title III Information:SECTION 311/312 PHYSICAL AND HEALTH HAZARD CATEGORY: IMMEDIATE (ACUTE), DELAYED (CHRONIC) IF PARTICULATES/FUMES ARE GENERAT ED DURING PROCESSING. SECTION 313

TOXIC CHEMICAL(S): ALUMINUM (FUME/DUST), BE RYLLIUM, CHROMIUM, COPPER, MANGANESE AND ZINC (FUME/DUST)

Federal Regulatory Information:TSCA STATUS: ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. CERCLA HAZARDOUS SUBSTANCES: BERYLLIUM, CHROMIUM, CHROMIUM COMPOUNDS, COPPER, LEAD, MANGANESE, NICKEL, ZINC .

State Regulatory Information:PENNSYLVANIA "SPECIAL HAZARDOUS SUBSTANCE": BERYLLIUM, NICKEL, CHROMIUM COMPOUNDS, HEXAVALEN T.

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