

ALCOTEC WIRE CO SUB OF ALCOA WELD WIRE INC. -- WELDING WIRE AND METALLIZING WIRE --  
3439-00-803-9492

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

Product ID:WELDING WIRE AND METALLIZING WIRE

MSDS Date:02/24/1998

FSC:3439

NIIN:00-803-9492

Status Code:A

MSDS Number: CKPHL

=== Responsible Party ===

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

Address:2750 AERO PARK DR.

Box:1320

City:TRAVERSE CITY

State:MI

ZIP:49685

Country:US

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

Emergency Phone Num:412-553-4001

Chemtrec Ind/Phone:(800)424-9300

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

Company Name:THERMION METALIZING SYSTEMS

Address:10331 CENTRAL VALLEY RD NW

City:POULSBO

State:WA

ZIP:98370

Country:US

Phone:360-69

2-6656  
CAGE:1ES73

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Composition/Information on Ingredients  
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Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
= Wt:.25  
OSHA PEL:15 MG/M3  
ACGIH TLV:10 MG/M3

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
= Wt:.4

Ingred Name:COPPER  
CAS:7440-50-8  
RTECS #:GL5325000  
= Wt:.1  
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  
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

Ingred Name:CHROMIUM  
CAS:7440-47-3  
RTECS #:GB4200000  
Minumum % Wt:.05  
Maxumum % Wt:.2  
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  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:TITANIUM

7429-90-5  
RTECS #:BD0330000  
Fraction by Wt: RMND  
OSHA PEL:15 MG/M3  
ACGIH TLV:10 MG/M3

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

Reports of Carcinogenicity:NTP:YES IARC:YES

Health Hazards Acute and Chronic:POTENTIAL HEALTH EFFECTS: EYES-FUMES  
CAN CAUSE IRRITATION. ULTRAVIOLET RADIATION FROM WELDING CAN CAUSE  
FLASH BURNS. SKIN-CAN CAUSE IRRITATION. ULTRAVIOLENT RADIATION FROM  
WELDING CAN CAUSE FLASH BURN S. INHALATION-CAN CAUSE RESPIRATORY  
TRACT IRRI

TATION, METAL FUME FEVER, AND OTHER HEALTH EFFECTS.

CANCER HAZARD. ALUMINUM IS WELDED IN A PROTECTIVE, INERT ATMOSPHERE  
SUCH AS ARGON OR HELIUM USING THE MIG OR TIG PROCESS. WLEDING  
PROCESSES GENERATE WELDING FUMES & AN INTENSE ULTRAVIOLET RADIATION  
WHICH RESULTS IN THE FORMATION OF OZONE & OXIDES OF NITROGEN.  
ULTRAVIOLET RADIATION FROM WELDING CAN CAU SE FLASH BURNS TO THE  
EYES & SKIN.

Explanation of Carcinogenicity:WELDING FUMES ARE CARCINOGENIC AND ARE  
LISTED AS A  
N IARC GROUP 2B.

Effects of Overexposure:EXPOSURE TO LOW LEVELS OF OZONE CAN CAUSE  
IRRITATION OF THE EYES, NOSE & THROAT. INHALATION CAN CAUSE CHEST  
TIGHTNESS, HEADACHE, SHORTNESS OF BREATH, COUGH, WHEEZE, NAUSEA &  
NARROWING OF AIRWAYS. SYMP TOMS DISAPPEAR WHEN REMOVED FROM  
EXPOSURE. EXPOSURE TO HIGH LEVELS OF OZONE MAY CAUSE ACUTE  
RESPIRATORY DISTRESS WITH SHORTNESS OF BREATH, PULMONARY CHANGES,  
HEMORRHAGE & PULMONARY EDEMA. SYMPTOMS OF PULMONARY EDEMA MAY BE  
DELAYE

D FOR ONE OR MORE HOUR. EXPOSURE OF TEST ANIMALS & HUMAN  
TISSUE TO HIGH CONCENTRATIONS HAS SHOWN CHROMOSOMAL CHANGES,  
REPRODUCTIVE EFFECTS, BLOOD CHANGES & DEATH FROM LUNG CONGESTION.

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

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

First Aid:EYES: FLUSH WITH PLENTY OF WATER OR SALINE FOR AT LEAST 15  
MINUTES. CONSULT A PHYSICIAN. SKIN: WASH THOROUGHLY WITH SOAP AND  
WATER

FOR AT LEAST 15 MINUTES. CONSULT A PHYSICIAN IF IRRITATION PERSISTS. INHALATION: REMOVE TO FRESH AIR. CHECK FOR CLEAR AIRWAY, AND PRESENCE OF PULSE. PROVIDE CPR FOR PERSONS WITHOUT PULSE OR RESPIRATION. CONSULT PHYSICIAN IMMEDIATELY.

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

Extinguishing Media:USE FIREFIGHTING METHOD & MATERIAL THAT ARE APPROPRIATE FOR SURROUNDING FIRE. USE COARSE WATER SPRAY ON CHIPS & TURNING. FOR FINES, DUST OR MOLTEN ALUMINUM, USE CLASS D EXTINGUISHER.

Fire Fighting Procedures:FIREFIGHTERS SHOULD WEAR NIOSH APPROVED POSITIVE PRESSURE, SELF-CONTAINED BREATHING APPARATUS & FULL PROTECTIVE CLOTHING WHEN APPROPRIATE. DO NOT USE: HALOGENATED EXTINGUISHING AGENTS ON SMALL CHIPS/FINES. DO NOT USE WATER IN FIGHTING FIRES AROUND MOLTEN ALUMINUM.

Unusual Fire/Explosion Hazard:MAY BE A POTENTIAL HAZARD UNDER FOLLOWING CONDITION: DUST 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.

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

Spill Release Procedures:IF MOLTEN: CONTAIN THE FLOW USING 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.

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===== 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 Precautions:SAMPLING TO ESTABLISH LEAD LEVEL EXPOSURE IS ADVISED WHERE EXPOSURE TO AIRBORNE PARTICULATE OR FUMES IS POSSIBLE. CONSULT OSHA LEAD STANDARD 29 CFR 1910.1025 FOR SPECIFIC HEALTH/INDUSTRIAL HYGIENE PRE CAUTIONS AND REQUIREMENTS TO FOLLOW WHEN HANDLING

# LEAD COMPOUNDS.

## ===== 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 C ONCENTRATIONS EXCEED THE LIMITS LISTED IN INGREDIENTS.

Ventilation:USE WITH ADEQUATE EXPLOSION PROOF VENTILATION TO MEET ESTABLISHED LIMITS.

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

Eye Protection:WELDERS SHOULD USE APPROPRIATE EQUIPMENT TO PREVENT FLASH BURNS

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:PERSONNEL ASSIGNED TO LAUNDRY BERYLLIUM CONTAMINATED CLOTHING SHOULD BE ADVISED OF BERYLLIUM'S PRESENCE AND POTENTIAL HEALT EFFECTS.

Supplemental Safety and Health

ALLOY:5356. WELD

ING OR CUTTING OPERATIONS INVOLVING

BERYLLIUM-CONTAINING BASE OR FILLER METAL SHALL BE DONE USING LOCAL EXHAUST VENTILATION & AIRLINE RESPIRATORS UNLESS ATMOSPHERIC TESTS UNDER THE MOST ADVERSE CONDITIONS HAVE SHOWN THAT THE WORKERS EXPOSURES IS WITHING ACCEPTABLE LEVELS AS DEFINED BY 29CFR1910.1000.

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:970-1215F; 521-657C

Spec Gravity:N/D

Solubility in Water:NONE

Appearanc

e and Odor:ODORLESS SOLID

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

Stability Indicator/Materials to Avoid:YES

CHIPS, FINES, DUST & MOLTEN ALUMINUM REACT WITH: WATER, HEAT, STRONG OXIDIZERS, ACIDS & ALKALIS, HALOGENATED COMPOUNDS, IRON OXIDE (RUST) & OTHER METAL OXIDES, IRON POWDER.

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

## ===== Toxicological Information =====

Toxicological Information:LD50 OR LC50 FOUND FOR ORAL, DERMAL OR INHALATION ROUTE OF ADMINISTRATION: NICKEL: ORAL RAT LD50: 9000 MG/KG BODY WEIGHT. SILICON: ORAL RAT LD50: 3160 MG/KG BODY WEIGHT. MANGANESE: ORAL RAT LD50: 9000 MG/KG BODY WEIGHT. IRON: INTRAPERITONEAL RABBIT LDLO: 20 MG/KG - NO TOXIC EFFECT NOTED.

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Ecological Information  
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Ecological:NOT AVAILABLE.

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Disposal Considerations  
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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 EQUIVALENT.

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MSDS Transport Information  
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Transport Information:U.S.A. DOT: NOT REGULATED ` ENTER THE PROPER FREIGHT CLASSIFICATION, "MSDS NUMBER", AND "PRODUCT NAME" ON THE SHIPPING WORK. CANADIAN TDG HAZARD CLASS & PIN: NOT REGULATED.

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Regulatory Information  
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SARA Title III Information:SECTION 311/312 PHYSICAL AND HEALTH HAZARD CATEGORIES: IMMEDIATE (ACUTE), DELAYED (CHRONIC) IF PARTICULATES/FUMES ARE GENERATED DURING PROCESSING. SECTION 313 TOXIC CHEMICALS: ALUMINUM (FUME/DUST), BERYLLIUM, CHROMIUM, COPPER, LEAD, MANGANESE, NICKEL, VANADIUM (FUME/DUST), 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 COMPOUNDS, COPPER, LEAD, MANGANESE, NICKEL, ZINC.

State Regulatory Information:PENNSYLVANIA "SPECIAL HAZARDOUS SUBSTANCE": BERYLLIUM, NICKEL, CHROMIUM COMPOUNDS, HEXAVALENT. CALIFORNIA PROPOSITION 65: CHROMIUM (HEXAVALENT COMPOUNDS), BERYLLIUM AND NICKEL ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. LEAD IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND REPR

ODUCTIVE TOXICITY.

===== Other Information =====

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