

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

S

tate: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:360-692

-6656  
CAGE:1ES73

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

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 M  
G/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

429-90-5  
RTECS #:BD0330000  
Fraction by Wt: RMND  
OSHA PEL:15 MG/M3  
ACGIH TLV:10 MG/M3

===== 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 IRRIT  
ATION, 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 AN  
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  
DELAYED

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.

===== 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 F

OR 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.

===== 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/FI NES. 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 D

UST IN CONTACT WITH WATER CAN GENERATE FLAMMABLE/EXPLOSIVE HYDROGEN GAS. THE SE GASES COULD PRESENT AN EXPLOSION HAZARD IN CONFINED OR POORLY VENTILATED SPACES.

===== 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.

===== 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 LAUNDER BERYLLIUM CONTAMINATED CLOTHING SHOULD BE ADVISED OF BERYLLIUM'S PRESENCE AND POTENTIAL HEALT EFFECTS.

Supplemental Safety and Health

ALLOY:5356. WELDI

NG OR CUTTING OPERATIONS INVOLVING

BERYLLIUM-CONTAINING BASE OR FILLER METAL SHALL BE DONE USING LOCAL EXHAUST VENTILATION & AIRLINE RESPIRATORS UNLESS ATMOSPHERIC TESTS UNDER THE MOS T 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

Appearance

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.

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

Ecological:NOT AVAILABLE.

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

Waste Disposal Methods:COLLECT SCRAP FOR REMELTING AND RECYCLING. TO MAINTAIN METAL PUNTY, IT MAY BE DESIRABLE TO SEGREGATE THIS SCRAP FROM OTHER ALLOYS. RCRA STATUS: CHARACTERIZE IN ACCORDANCE WITH 40 CFR 261 OR STATE EQU IVALENT.

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

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 & P IN: NOT REGULATED.

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

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), BE RYLLIUM, 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 O F CALIFORNIA TO CAUSE CANCER. LEAD IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND REPRO

DUCTIVE TOXICITY.

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

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