

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 LAUNDR 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, HALOGENTATED 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 PUNITY, 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 =====

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 as
some responsibility for the suitability of this information to their particular situation.