

GULF WIRE CORP -- WROUGHT ALUMINUM PRODUCTS, 4XXX SERIES ALLOYS -- 3439-00-268-9654
===== Product Identification =====

Product ID:WROUGHT ALUMINUM PRODUCTS, 4XXX SERIES ALLOYS

MSDS Date:10/29/1996

FSC:3439

NIIN:00-268-9654

Status Code:A

MSDS Number: CKLSP

=== Responsible Party ===

Company Name:GULF WIRE CORP

Address:13901 OLD GENTILLY ROAD

City:NEW ORLEANS

State:LA

ZIP:70129

Country:US

Info Phone

Num:504-254-0062

Emergency Phone Num:504-254-0062

Resp. Party Other MSDS Num.:HAZMIN NUMBER: 013229

CAGE:43769

=== Contractor Identification ===

Company Name:GULF WIRE CORP

Address:13901 OLD GENTILLY ROAD

Box:City:NEW ORLEANS

State:LA

ZIP:70129

Country:US

Phone:504-254-0062

CAGE:43769

Company Name:R & D METALS & CHEMICALS, INC

Address:201C PERIMETER PARK

Box:22533

City:KNOXVILLE

State:TN

ZIP:37922-2233

Country:US

Phone:423-531-6065 / FAX: 423-531-2044

Contract Num:SP0490-99-M-RA93

CAGE:56406

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Composition/Information on Ingredients
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Ingred Name:ALUMINIUM

CAS:7429-90-5

RTECS #:BD0330000

Fraction by Wt: 72.0% MIN.

OSHA PEL:15 MG/M3 T DUST

ACGIH TLV:10.5 MG/M3 T DUST

Ingred Name:SILICON

CAS:7440-21-3

RTECS #:VW0400000

Fraction by Wt: 19.0% MAX

OSHA PEL:15 MG/M3 T DUST

ACGIH TLV:10 MG/M3 T DUST

Ingred Name:COPPER

CAS:7440-50-8

RTECS #:GL5325000

Fraction by Wt: 5.0% MAX

OSHA PEL:1 MG/M3 DUST/MIST

ACGIH TLV:1 MG/M3 DUST/MIST

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:50

00 LBS

Ingred Name:TIN

CAS:7440-31-5

RTECS #:XP7320000

Fraction by Wt: 3.3% MAX

OSHA PEL:2 MG/M3 METAL

ACGIH TLV:2 MG/M3 METAL

Ingred Name:MAGNESIUM

CAS:7439-95-4

RTECS #:OM2100000

Fraction by Wt: 2.0% MAX

OSHA PEL:15 MG/M3 T PARTIC

ACGIH TLV:10 MG/M3 OXIDE FUME

Ingred Name:NICKEL

CAS:7440-02-0

RTECS #:QR5950000

Fraction by Wt: 1.3% MAX

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Fraction by Wt: 1.0% MAX

OSHA PEL:10 MG/M3 DUST

ACGIH TLV:5 MG/M3 DUST

ingred Name:CHROMIUM (CR II, CR III, CR VI)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 0.15% MAX

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

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

Reports of Carcinogenicity:NTP:YES IARC:YES

Health Hazards Acute and Chronic:ITEM AS PURCHASED IS NON-HAZARDOUS,
NON-FLAMMABLE SOLID METAL ALLOYS FOR USE IN WELDING ALUMINUM
PRODUCTS, PLASMA ARC CUTTING, ARC SPRAY METALIZING. POTENTIAL
HEA

LTH EFFECTS WHEN PROCESSING OCCURS, WHICH GENERATES DUST/FUME,
AND ALSO INCLUDES MILLING, CUTTING, GRINDING OPERATIONS: EYES: CAN
CAUSE IRRITATION. SKIN: CAN CAUSE IRRITATION AND SENSITIZATION.
INHALATION: CAN CAUSE UPPER RESPIRATORY T RACT IRRITATION, METAL
FUME FEVER, AND OTHER HEALTH EFFECTS. ALSO A CANCER HAZARD. DUST
CLOUDS AND/OR A MIXTURE OF MOLTEN METAL AND WATER MAY BE EXPLOSIVE.
FINES AND DUST MAY GENERATE FLAMMABLE, EXPLO SIVE HYDROGEN GAS ON
CONTACT WITH

WATER.

Explanation of Carcinogenicity:WHEN PROCESSING WITH THIS PRODUCT
CHROMIUM, NICKEL, WELDING FUMES, AND OTHER GENERATED PRODUCTS ARE
LISTED AS CARCINOGENIC BY NTP AND/OR IARC.

Effects of Overexposure:IF PROCESSING: EYES: IRRITATION. SKIN:
IRRITATION, SENSITIZATION, DERMATITIS, ULCERATION. INHALATION:
UPPER RESPIRATORY TRACT IRRITATION, METAL FUME FEVER, PULMONARY
EDEMA, ASTHMA, KIDNEY DAMAGE AND O THER HEALTH EFFECTS. CANCER
HAZARD.

Medical Cond Aggravated by Exposur

e:CHRONIC LUNG DISEASE, ASTHMA, SKIN
RASHES, AND WILSON'S DISEASE.

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

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

ESPIRATIONS. CONSULT A PHYSICIAN IMMEDIATELY.

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

Flash Point:NOT FLAMMABLE

Extinguishing Media:NON-FLAMMABLE. USE COURSE WATER SPRAY ON CHIPS, TURNINGS. USE MEDIA THAT IS APPROPRIATE FOR SURROUNDING FIRE. IF MOLTEN , USE CLASS D EXTINGUISHING AGENTS.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD WEAR NIOSH APPROVED, POSITIVE PRESSURE, SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING WHEN APPROPRIA

TE. DO NOT USE HALOGENATED

EXTINGUISHING AGENTS ON SMALL CHIP S/FINES. DO NOT USE WATER IN FIGHTING FIRES AROUND MOLTEN METAL.

Unusual Fire/Explosion Hazard:MOLTEN ALUMINUM AND WATER IS AN EXPLOSIVE COMBINATION. DUST CLOUDS MAY BE EXPLOSIVE: PREVENT FORMATION OF A DUST CLOUD DURING PROCESSING.

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

Spill Release Procedures:SMALL/LARGE SPILL: IF MOLTEN: CONTAIN THE FLOW USING DRY SAND OR SALT FLUX AS A DAM. DO NO

T USE SHOVELS OR HAND

TOOLS TO HALT THE FLOW OF MOLTEN METAL. ALLOW THE SPILL TO COOL BEFORE REMELTING AS SCRA P.

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

Handling and Storage Precautions:IF PROCESSING OF THESE PRODUCTS INCLUDES POLISHING OR GRINDING OPERATIONS WHERE DUST OR EXTREMELY FINE PARTICULATE IS GENERATED, OBTAIN AND FOLLOW THE SAFETY PROCEDURES AND EQUIPMENT GUIDES CONTAINED IN ALUMINUM ASSOCIATION BULLETIN F-1 AND NATIONAL FIRE PR

OTECTION ASSOCIATION (NFPA) BROCHURES.

Other Precautions:USE WITH ADEQUATE EXPLOSION-PROOF VENTILATION TO MEET EXPOSURE LIMITS. USE NON-SPARKING HANDLING EQUIPMENT. COVER AND RESEAL PARTIALLY EMPTY CONTAINERS. PROVIDE GROUNDING AND BONDING WHERE NECESSARY T O PREVENT ACCUMULATION OF STATIC CHARGES DURING ALUMINUM DUST HANDLING AND TRANSFER OPERATIONS.

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

Respiratory Protection:USE APPROPRIATE NIOSH APPROVED RE

SPIRATOR

(DUST/MIST/FUMES OR SUPPLIED AIR) DURING PROCESSING IF POTENTIAL FOR OVEREXPOSURE EXISTS. MINIMIZE BREATHING OIL VAPORS AND MIST.

Ventilation:USE WITH ADEQUATE VENTILATION TO MEET EXPOSURE LIMITS.

Protective Gloves:WEAR IMPERVIOUS GLOVES TO AVOID REPEATED OR PROLONGED SKIN CONTACT.

Eye Protection:USE SAFETY GLASSES/GOGGLES TO AVOID EYE CONTACT.

Other Protective Equipment:PERSONNEL WHO HANDLE & WORK WITH MOLTEN ALUMINUM SHOULD UTILIZE PRIMARY PROTECTIVE CLOTHING LIKE FACE

SHIELDS,FIRE RESISTANT TAPPER'S JACKETS, LEGGINGS, SPATS & SIMILAR EQUIPMENT TO PREVENT BURN INJURY.

Work Hygienic Practices:CLEANSE SKIN AFTER CONTACT, BEFORE BREAKS & MEALS & AT END OF WORK PERIOD. OIL COATING IS READILY REMOVED FROM SKIN WITH WATERLESS HAND CLEANERS FOLLOWED BY A THOROUGH WASHING WITH SOAP AND WATER.

Supplemental Safety and Health

IF THE PRODUCT IS COATED WITH OIL, WEAR OIL-RESISTANT GLOVES TO AVOID SKIN CONTACT. MINIMIZE BREATHING OIL VAPORS & MIST.

REMOVE OIL

CONTAMINATED CLOTHING; LAUNDRY OR DRY-CLEAN BEFORE REUSE. REMOVE OIL CONTAMINATED SHOES & THOROUGHLY CLEAN & DRY BEFORE REUSE.

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

HCC:N1

Melt/Freeze Pt:=621.1C, #####F

M.P/F.P Text:GENERALLY 1150-1200F

Spec Gravity:2.70 - 2.73 G/CM3

Solubility in Water:NONE

Appearance and Odor:SOLID:SHEET, PLATE, WIRE, ROD, BAR, EXTRUSION, FORGINGS, SILVERY COLOR, NO ODOR

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

Stability Indicator/Materials to Avoid:YES

WATER/ALUMINUM MIX MAY BE HAZ. WHEN CONFINED. OXIDIZES WITH HEAT AT RATE DEPENDENT UPON TEMP. POTENTIALLY EXPLOSIVE REACTION WHEN HEATED WITH METAL OXIDES, NITRATES, SULFATES, ETC. MOLTEN AL CAN REACT VIOLENTLY WITH WATER,

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

Hazardous Decomposition Products:REACTS WITH STRONG OXIDIZERS, ACIDS, AND ALKALIS. FINELY DIVIDE

D AL CAN REACT VIOLENTLY WITH HALOGENATED COMPOUNDS. REACTS WITH IRON POWDER AND WATER AT TEMP. ABOVE 1470F FORMINGEXPLOSIVE HYDROGEN GAS.

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

Toxicological Information:IRON: INTERPERITONEAL RABBIT LDLO = 20 MG/KG- NO TOXIC EFFECT NOTED. NICKEL: ORAL RAT LD50 = 9000 MG/KG. SILICON: ORAL RAT LD50 = 3160 MG/KG.

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

Ecological:ECOTOXICOLOGICAL/ CHEMICAL FATE INFORMATION: NO INFORMATION FOUND.

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

Waste Disposal Methods:IF REUSE OR RECYCLING IS NOT POSSIBLE, MATERIAL MAY BE DISPOSED OF AT AN INDUSTRIAL LANDFILL. RCRA HAZARDOUS WASTE NUMBER: NOT FEDERALLY REGULATED IN THE U.S. IF DISPOSED OF "AS IS". OTHERWISE, CHARAC TERIZE IN ACCORDANCE WITH APPLICABLE REGULATIONS (40 CFR 261 OR STATE EQUIVALENT IN THE U.S.).

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

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

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

SARA Title III Information:SECTION 311/312 PHYSICAL AND HEALTH HAZARD CATEORIES: IMMEDIATE (ACUTE), DELAYED (CHRONIC) IF PARTICULATES/FUMES ARE GENERATED DURING PROCESSING. IF MOLTEN: REACT

IVE HAZARD. SECTION 313 TOXIC CHEMICAL S: ALUMINUM (FUME/DUST), CHROMIUM COMPOUNDS, COPPER, COPPER COMPOUNDS, NICKEL.

Federal Regulatory Information:ALL ELECTRICAL EQUIPMENT MUST BE SUITABLE FOR USE IN HAZARDOUS ATMOSPHERES INVOLVING ALUMINUM POWDER IN ACCORDANCE WITH 29 CFR 1910-307, THE NATIONAL ELECTRICAL CODE, NFPA 70, CONTAINS GUIDELINES FOR DETERMINING THE TYE AND DESIGN OF EQUIPMENT AND INSTALLATION WHICH WILL MEET THIS REQUIREMENT. TSCA STATUS: ALL COMPONENTS OF

THIS PRODUCT ARE LISTED ON THE TSCA
INVENTORY. CERCLA HAZARDOUS SUBSTANCE S: CHROMIUM, COPPER, NICKEL.
RCRA HAZARDOUS WASTE NO. NOT FEDERALLY REGULATED IN THE U.S. IF
DISPOSE D OF "AS IS". OTHERWISE, CHARACTERIZE IN ACCORDANCE WITH
APPLICABLE REGULATIONS (40 CFR 261 OR STATE EQUIVALENT IN THE
U.S.).

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

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