

ALCOTEC WIRE CO SUB OF ALCOA WELD WIRE INC. -- WELDING WIRE, ALLOY 4145 --  
3439-00-254-5030

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

Product ID:WELDING WIRE, ALLOY 4145  
MSDS Date:06/03/1992  
FSC:3439  
NIIN:00-254-5030  
MSDS Number: BXPTF  
=== 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  
In  
fo Phone Num:616-941-4111 / 616-941-9154 (FAX)  
Emergency Phone Num:616-941-4111 / 412-553-4001  
Preparer's Name:STEPHEN L. ANDERSON,PATNR  
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, 9.3-10.7%.  
CAS:7440-21-3  
RTECS #:VW04000

00

Fraction by Wt: SEE ING

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9495

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Fraction by Wt: 0.8%

Other REC Limits:NONE RECOMMENDED

Ingred Name:COPPER (SARA 313) (CERCLA)

CAS:7440-50-8

RTECS #:GL5325000

Fraction by Wt: 3.3-4.7%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.1MG/M3 FUME/1 DUST

ACGIH TLV:0.2 MG/M3 FUME; 9495

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:MANGANESE (SARA 313)

CAS:7439-96

-5

RTECS #:OO9275000

Fraction by Wt: 0.15%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:C 5 MG/M3 DUST

ACGIH TLV:5 MG/M3 DUST 9495

Ingred Name:MAGNESIUM

CAS:7439-95-4

RTECS #:OM2100000

Fraction by Wt: 0.15%

Other REC Limits:NONE RECOMMENDED

Ingred Name:CHROMIUM (SARA 313) (CERCLA)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 0.15%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3; 9495

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:ZINC (SARA 313) (CERCLA)

CAS:7440-66-6

R

TECS #:ZG8600000  
Fraction by Wt: 0.20%  
Other REC Limits:NONE RECOMMENDED  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:OTHERS, EACH (INCLUDING BERYLLIUM INGRED #9) (TOTAL:0.15%)  
Fraction by Wt: 0.05%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:BERYLLIUM (SARA 313) (CERCLA) SHALL NOT EXCEED 0.0008%.  
CAS:7440-41-7  
RTECS #:DS1750000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.002 MG/M3, Z-2  
ACGIH TLV:.002 MG/M3, A2; 9495

Ingred Name:ALUMINIUM  
CAS:7429-90-5  
RTECS #:BD0330000  
Fraction by Wt: BALANCE  
Other REC Limits:NONE RECOMMENDED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:WELDING FUMES,INTENSE ULTRAVIOLET RADIATION,WELDING ARCS CAUSES HEALTH HAZ.MUC MEMB/PULM/EYES/NOSE/THROAT/SKIN IRRIT,PULM CHANGES,CONGESTION,EDEMA,FLASH BURNS TO EYES/SKIN.FORMATION OF METHEMOGLOBIN & SUBSEQUENT ACTION ON CNS FRM NITRIC OXIDE.INHAL >100PPM NITROGEN MONOXIDE CAN BE FATAL.CR CMPDS:NASAL/LUNG CANCER.(SUP)  
Explanation of Carcinogenicity:PER MSDS:WELDING FUMES,NICKEL,HEXAVALENT CHROMIUM CMPDS,BERYLLIUM CMPDS,LEAD,  
Effects of Overexposure:IRRIT OF EYE/SKIN/NOSE/THROAT/RESP TRACT.GI DISTURBANCES.EYE/SKIN FLASH BURNS,CNS EFFECTS,METAL FUME FEVER,METALLIC TASTE,LOSS OF SLEEP,APPETITE LOSS,TIREDNESS,IRRITABILITY.PNEUMONITIS(INFLAMM OF LUNG TISS),BERYLLIOSIS(PROGRESSIVE LUNG

DISEASE),NEUROPATHY,ANEMIA,CHROMOSOMAL CHANGES.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INHAL:IMMED REMOVE TO FRESH AIR. BREATH STOPPED PROVIDE OXYGEN & RESPIRATION. CONSULT PHYSICIAN. SKIN/EYES:IRRITATION DEVELOPS CONSULT PHYSICIAN.

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

Extinguishing Media:USE CLASS D EXTINGUISHING AGENTS OR DRY SAND ON F  
IRES.

Fire Fighting Procedures:USE COARSE WATER SPRAY ON CHIPS/TURNINGS/ETC.DO NOT USE HALOGENATED EXTINGUISHING AGENTS ON SM CHIPS/FINES.

Unusual Fire/Explosion Hazard:DOES NOT PRESENT FIRE/EXPLO HAZ UNDER NORMAL CONDITIONS.SM CHIPS/FINE TURNINGS/DUST MAY IGN READILY.DUST CLOUDS MAY BE EXPLOSIVE;PREVENT FORMATION OF DUST CLOUD

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

Spill Release Procedures:COLLECT SCRAP FOR REMELTING.

===== Handli  
ng and Storage =====

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.  
Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection:WHERE EXPO LIMIT IS OR MAY BE EXCEEDED USE NIOSH APPROVED RESP PROTECTION. SELECT APPROPRIATE RESP (FUME RESP,HIGH EFFICIENCY DUST & FUME RESP,SUPPLIED-AIR RESP,ETC)BASED ON CONCEN OF ACTUAL OR POTENTIAL AIRBORNE CONTAMINANTS PRESENT.

Vent  
ilation:USE W/ADEQUATE VENTILATION TO MEET EXPO LIMITS.FUMES/DUST PROVIDE GEN/LOC EXHA VENTI TO MEET BE PEL REQMTS.

Protective Gloves:AS REQUIRED FOR WELDING.

Eye Protection:AS REQUIRED FOR WELDING.

Other Protective Equipment:WELDERS SHOULD USE APPROPRIATE EQPMT.REFER TO OSHA 29CFR1910.252.REFER TO 29CFR1910.1025 FOR INDUST HYG STD FOR PB HNDLG

Work Hygienic Practices:ADVISE PERSONNEL ASSIGNED TO LAUNDER BE CONTAMIN CLOTH OF HAZ.PRACTICE GOOD PERSONAL HYGIENE.

Supplemental Safety

and Health

DENSITY:0.1LB/IN3. HEALTH HAZ:COPPER:NAU,METAL FUME FEVER,RESP TRACT IRRIT.NICKEL DUST/FUME:PNEUMOCONIOSIS,CANCER.BERYLLIUM:TOXIC BY INHAL,PNEUMONITIS,BERYLLIOSIS,SYSTEMIC BERYLLIUM DISEASE.LEAD:NEURO PATHY,GI DISTURB,ANEMIA,CHROMOSOMAL CHANGES.

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:970F,521C

Solubility in Water:NONE

Appearance and Odor:SILVERY COLOR, SOLID WELDING ELECTRODE, NO ODOR.

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

Stability Indicator/Materials to Avoid:YES  
NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:PREVENT FORMATION OF DUST CLOUD.

Hazardous Decomposition Products:OZONE, OXIDES OF NITROGEN. HEXAVALENT CHROMIUM CMPDS,

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

Waste Disposal Methods:IF MATL IS TO BE DISPOSED TCLP LEACHATE TESTING FOR CHROMIUM & REACTIVITY, EXPLOSIVE SUCATEGORY TESTING IS RECOMMENDED TO DETERMINED IF WASTE IS RCRA HAZ.

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