

INWELD MFG CORP -- COVERED ELECTRODE FOR MMAW -- 3439-00-262-2742

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

Product ID:COVERED ELECTRODE FOR MMAW

MSDS Date:09/01/1989

FSC:3439

NIIN:00-262-2742

MSDS Number: BWSDX

=== Responsible Party ===

Company Name:INWELD MFG CORP

Address:1471 JERSEY AVE

City:NORTH BRUNSWICK

State:NJ

ZIP:08902

Country:US

Info Phone Num:800-346-5368, FAX:201-545-3831

Emergency Phone Num

:201-545-3800

CAGE:66376

=== Contractor Identification ===

Company Name:INWELD MFG CORP

Address:3962 PORTLAND ST

Box:40

City:COPLAY

State:PA

ZIP:18037-0040

Country:US

Phone:610-261-1900

CAGE:66376

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

Ingred Name:NICKEL (SARA III)

CAS:7440-02-0

RTECS #:QR5950000

Fraction by Wt: 40-70%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9394

Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Fract

ion by Wt: 0-15%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3; 9394  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: 0.5-10%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 0.5-6%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:C 5 MG/M3  
ACGIH TLV:5 MG/M3, DUST; 9394

Ingred Name:MOLYBDENUM  
CAS:7439-98-7  
RTECS #:QA4680000  
Fraction by Wt: 0-15%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 PPM.  
ACGIH TLV:10 PPM.

Ingred Name:NIOBIUM (ALSO CALLED COLUMBIUM)  
CAS:7440-03-1  
Fraction by Wt: 0-5%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:COPPER (SARA III)  
CAS:7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 0-2%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2 MG/M3 FUME; 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fraction by Wt: 0.1-1.0%  
Other REC Limits:NONE RECOMMENDED

DED  
OSHA PEL:10 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:TITANIUM  
CAS:7440-32-6  
RTECS #:XR1700000  
Fraction by Wt: 0-2%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:GRAPHITE (NATURAL)  
CAS:7782-42-5  
RTECS #:MD9659600  
Fraction by Wt: 0-3%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MPPCF; Z-3  
ACGIH TLV:2 MG/M3 RDUST; 9394

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)  
CAS:1317-65-3  
RTECS #:EV9580000  
Fraction by Wt: 5-10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TD  
UST  
ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:CALCIUM FLUORIDE  
CAS:14542-32-6  
RTECS #:9999999ZZ  
Fraction by Wt: 2-5%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:STRONTIUM CARBONATE  
CAS:1633-05-2  
Fraction by Wt: 0-15%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:CRYOLITE (SODIUM ALUMINUM FLUORIDE)  
CAS:15096-52-3  
RTECS #:WA9625000  
Fraction by Wt: 2-5%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM TITANATE  
CAS:12030-97-6  
Fraction by Wt: 0-3%  
Other REC Limits:NONE RECOMMENDED

Ingr

ed Name:TITANIUM DIOXIDE  
CAS:13463-67-7  
RTECS #:XR2275000  
Fraction by Wt: 0-10%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:POTASSIUM SILICATE  
CAS:1312-76-1  
Fraction by Wt: 0-2%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM SILICATE  
CAS:1344-09-8  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:PRODUCT ECWNI CONTAINS ABOUT 70% COPPER & 30% NICKEL.  
RTECS #:9999999ZZ  
Other REC Limits:NONE RECOMMENDED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES  
Health Hazards Acute and Chronic:ELECTRIC ARC-WELDING MAY CREATE ONE OR  
MORE OF HEALTH HAZ:FUMES/GASES-DANGEROUS TO HEALTH;ARC RAYS-INJURE  
EYES,BURN SKIN;ELECTRIC SHOCK-KILL. SHORT-TERM OVEREXPO TO WELDING  
FUMES RESULT IN DISCOMFORT. LONG-TERM OVEREXPO MAY LEAD TO  
SIDEROSIS(IRON DEPOSIT IN LUNGS) & BELIEVED BY  
SOME TO AFFECT PULM  
FUNCTION.  
Explanation of Carcinogenicity:PER MSDS:CONTAINS NICKEL &  
CHROMIUM:CARCINOGENICITY-YES.  
Effects of Overexposure:ACUTE:DIZZINESS,NAUSEA,DRYNESS,IRRIT OF  
NOSE/THROAT/EYES,TIGHTNESS IN CHEST,FEVER,ALLERGIC RXS.  
CHRONIC:SIDEROSIS,AFFECT PULM FUNCTIN.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:REMOVE TO FRESH AIR. OBTAIN MED ATTN. EMPLOY 1ST AID TECHNI

QUES

RECOMMENDED BY AMERICAN RED CROSS.

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

Extinguishing Media:NONE SPECIFIED BY MANUFACTURER. HOWEVER USE APPROPRIATE EXTINGUISHING MEDIA FOR SURROUNDING FIRE/MATERIALS.

Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER. HOWEVER USE APPROPRIATE PROTECTIVE CLOTH/EQPMT AS CONDITIONS WARRANT.

Unusual Fire/Explosion Hazard:WELDING ARC & SPARKS CAN IGNITE COMBUSTIBLES & FLAMM. REFER TO AMER NAT STD Z49.1 FOR FIRE PREVENTION DURING THE USE OF WELDING & ALLIED PROCEDURES.

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

Spill Release Procedures:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:CLEAR WELD FUMES W/EXHA SYS.MAKE SURE INHAL AIR DOESN'T CONTAIN FUME CONSTITUENTS ABOVE PEL.SEE AMER STD Z49.1-1983"SAF IN WELD/CUT"&WELD HANDBK VOL1.

Other Precautions:SEE AWS PUBLICATION:"FUMES & GASES IN WELDING ENVIRO",AWS F1.1,AWS F1.2-1985.ONE RECOMMENDED WAY TO DETERMINE COMPOSITION/QUANT OF FUME/GASES TO WHICH WORKERS ARE EXPO IS TO TAKE AIR SAMPLE FRM INSIDE WELDER'S HELMET OR WORKER'S BREATH ZONE

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

Respiratory Protection:USE RESPIRABLE FUME RESPIRTORY OR AIR SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPO BELOW RECOMMENDED EXPO LIMIT

Ventilation:USE ENOUGH VENTI/LOC EXHAU @ARC/BOTH TO KEEP FUME/GAS FRM WORKER'S BREATH ZONE & GENERAL AREA.

Protective Gloves:WELDER'S GLOVE

Eye Protection:HELMET,FACESHIELD W/FILT LENS.

Other Protective Equipment:SCREENS/FLASH GOGG TO SHIELD OTHERS.START W/SHADE TOO DARK TO SEE WELD ZONE & CONT TIL SEE ZONE.HAND/HEAD/BODY PROT

Work Hygienic Practices:READ/UNDERSTAND MFG'S INSTRUCTIONS/PRECAUT LABEL ON PRODUCT.TRAIN WELDER KEEP HEAT OUT OF FUMES & INSULATE FRM WORK/GRND

Supp

lemental Safety and Health

HAZ DECOMP PROD:WELDER'S HEAD POSITION,ATMS CONTAMIN.REASONABLY  
EXPECT:NICKEL,OXIDES,COMPLEX OXIDES OF  
IRON,CHROMIUM,MANGANESE,SILICON,TITANIUM,COPPER,MOLYBDENUM,ALUMINUM  
,COLUMBIUM,FLUORIDES.CARBON MO NOXIDE/CARBON DIOXIDE FRM GAS  
RX,OZONE/NITROGEN OXIDES FRM RADIOATION FRM ARC.

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

HCC:N1

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

Stability Indicator/Material

s to Avoid:YES

NONE.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:COMPO/QUALITY OF WELDING FUMES/GAS  
DEPEND ON:METAL,PROCESS,PROCEDURE,ELECTRODES,METAL COATINGS,#OF  
WORKERS,VENTI,(SUPPL)

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING  
ENVIRO. DISCARD ANY PROUDCT RESIDUE,DISPOSABLE CNTNR OR LINER IN  
ENVIRONMENTALLY ACCEPTABLE MANNER IN FULL COM  
PLIANCE  
W/FED/STATE/LOC REGS.

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