

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 Nu

m: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

Frac

tion 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 RECOMME

NDED
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 T
DUST
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

Ing

red 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 TECHN

IQUES

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,FACE SHIELD 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

Sup

plemental 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/Materia

Is 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 CO

MPLIANCE

W/FED/STATE/LOC REGS.

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