

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

=====
===== 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 FI

RE

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

Supp

emental 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.

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.