

INCO ALLOYS INTERNATIONAL INC -- NI-ROD WELDING ELECTRODES AND CORED WIRE --
3439-01-135-3913

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

Product ID:NI-ROD WELDING ELECTRODES AND CORED WIRE

MSDS Date:12/01/1990

FSC:3439

NIIN:01-135-3913

MSDS Number: BXBQN

=== Responsible Party ===

Company Name:INCO ALLOYS INTERNATIONAL INC

Address:1401 BURRIS RD

City:NEWTON

State:NC

ZIP:28658

Country:US

Info Phone Num:800

-624-3411

Emergency Phone Num:304-526-5780

CAGE:9Z762

=== Contractor Identification ===

Company Name:INCO ALLOYS INTERNATIONAL INC

Address:1401 BURRIS RD

Box:City:NEWTON

State:NC

ZIP:28658-1754

Country:US

Phone:800-624-3411

CAGE:9Z762

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

Ingred Name:BARIUM FLUORIDE; (BAF2). LD50:(ORAL,RAT)250 MG/KG.

CAS:7787-32-8

RTECS #:CQ9100000

Fraction by Wt: 1-5%

Other REC Limits:2.5 MG/M3 (F)

OSHA PEL:0.5 MG/M3 (BA)

ACGIH TLV:0.5 MG/M3 (BA)

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Ingred Name:CALCIUM CARBONATE; (CACO3). LD50:(ORAL,RAT)6,450 MG/KG.

CAS:1317-65-3

RTECS #:EV9580000

Fraction by Wt: 1-5%

Other REC Limits:NONE SPECIFIED

OSHA PEL:15MG/M3 TDUST;5 RESP

ACGIH TLV:10MG/M3 TDUST

Ingred Name:CARBON (MFR REC LIMITS AS CARBON BLACK)

CAS:7440-44-0

RTECS #:FF5250100

Fraction by Wt: 1-5%

Other REC Limits:3.5 MG/M3 (MFR)

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:2 MG/M3 TDUST; 9293

Ingred Name:COPPER; (CU) (SARA III)

CAS:7440-50-8

RTECS #:GL5325000

Fraction by Wt: 1-5%

Other R

EC Limits:NONE SPECIFIED

OSHA PEL:0.1MG/M3 FUME;1 DUST

ACGIH TLV:0.2MG/M3 FUME;1 DUST

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:IRON; (FE)

CAS:7439-89-6

RTECS #:NO4565500

Fraction by Wt: 1-5%

Other REC Limits:NONE SPECIFIED

OSHA PEL:10 MG/M3 TDUST

ACGIH TLV:5 MG/M3

Ingred Name:MANGANESE; (MN) (SARA III). LD50:(ORAL,RAT)9,000 MG/KG.

CAS:7439-96-5

RTECS #:OO9275000

Fraction by Wt: 1-5%

Other REC Limits:1 MG/M3;3 STEL FUME

OSHA PEL:(C) 5 MG/M3 DUST

ACGIH TLV:5 MG/M3 DUST 9293

Ingred

Name:NICKEL; (NI) (SARA III). LD50:(ORAL,RAT)>9,000 MG/KG.

CAS:7440-02-0

RTECS #:QR5950000

Fraction by Wt: 60-100%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3

Ingred Name:STRONTIUM CARBONATE; (SRCO3)

CAS:1633-05-2

Fraction by Wt: 7-13%

Other REC Limits:NONE SPECIFIED

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===== Hazards Identification =====
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LD50 LC50 Mixture:SEE INGREDIENTS.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES

OSHA:NO

Health Hazards Acute and Chronic:AS SHIPPED, THESE ELECTRODES HAVE NO KNOWN TOXICOLOGICAL PROPERTIES OTHER THAN CAUSING ALLERGIC REACTIONS IN INDIVIDUALS SENSITIVE TO METALS. USER GENERATED DUSTS AND FUMES MAY ON CONTACT WITH THE SKI N OR EYES PRODUCE MECHANICAL IRRITATION. CHRONIC EXPOSURE MAY CAUSE DERMATITIS OR CONJUNCTIVITIS.

Explanation of Carcinogenicity:NICKEL:IARC GRP 1, NTP GRP 2.

Effects of Overexposure:SKIN IRRITATION, EYE IRRITATION, DERMATITIS, CO

NJUNCTIVITIS. EXPOSURE TO FUMES GENERATED FROM THE WELDING PROCESS MAY POSE A LONG TERM HEALTH HAZARD.

Medical Cond Aggravated by Exposure:ALLERGIC REACTIONS IN INDIVIDUALS SENSITIVE TO METAL(S) CONTAINED IN THESE WELDING PRODUCTS.

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===== First Aid Measures =====
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First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSIS

T, GET MEDICAL

ATTENTION. INH ALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET MEDICAL ATTENTION. INGESTION: IF SYMPTOMS OF INGESTION ARISE, GET MEDICAL ATTENTION.

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===== Fire Fighting Measures =====
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Flash Point:NON-FLAMMABLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:NONFLAMMABLE. USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPME

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Unusual Fire/Explosion Hazard:NONFLAMMABLE; HOWEVER SPARKS FROM WELDING IN USER OPERATIONS COULD IGNITE FLAMMABLE OR COMBUSTIBLE LIQUIDS, VAPORS & SOLIDS.

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

Spill Release Procedures:VACUUM OR SHOVEL ANY SPILLED MATERIAL INTO A SUITABLE CONTAINER. ALLOY WASTES ARE NORMALLY COLLECTED TO RECOVER METAL VALUES.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====
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Handling and Storage Precautions:MAINTAIN EXPOSURES BELOW THE ACCEPTABLE EXPOSURE LIMITS. USE INDUSTRIAL HYGIENE AIR MONITORING DURING YOUR USE OF THIS MATERIAL.

Other Precautions:REFER TO ANSI Z49.1 & OSHA 29 CFR 1910 FOR IMPORTANT ADDITIONAL INFORMATION. DO NOT EXPOSE SKIN/EYES TO HEAT & RADIATION FROM WELDING OPERATIONS.

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

Respiratory Protection:RESP PROT IS NEC WHEN EXPOS LIMITS FOR AIRBORNE CONTAM ARE EXCEEDED DURING WELDING W/ELECTRODES. USE NIOSH/MSHA APPRVD AIR- SUPPLIED RESP IN CONFINED SPACES. USE ONLY NIOSH/MSHA APPRVD RESPS I/A/W 29 CFR 1910.134 - RESP PROT.

Ventilation:USE LOCAL EXHAUST WHEN WELDING.

Protective Gloves:WELDING GLOVES.

Eye Protection:WELDERS HELMET/FCSHLD W/APPROP LENS

Other Protective Equipment:PROTECTIVE EQUIPMENT IS REQUIRED WHEN WELDING. WEAR FLAME RETARDANT CLOTHING.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER
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EFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

HAZ DECOMP PROD:FLUORIDES, CO, OZONE & NOX. PHOSGENE CAN BE PRODUCED IF CHLORINATED SOLVENT VAPORS ARE PRESENT.

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

HCC:N1

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Text:>1832F,>100

Vapor Pres:NOT GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:4-6 G/CC

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:NEGLIGIBLE

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Appearance and Odor:ODORLESS SOLID. METALLIC SILVER COLORED WIRE W/FLUX COATING OR FLUX CORE.

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

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

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:WELDING FUMES & GASES DEPEND ON BASE METAL, PROCESS, ELECTRODE & FLUX & MAY INCL METAL, METAL OXIDES, CHROMATES, (SUPDAT

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

Waste Disposal Methods:ALLOY WASTES ARE NORMALLY COLLECTED TO RECOVER METAL VALUES. HOWEVER, IF DISPOSAL IS NECESSARY, DISPOSE I/A/W FEDERAL, STATE OR LOCAL REGULATIONS.

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