

INCO ALLOYS INTERNATIONAL INC -- INCONEL FILLER METAL 718 -- 3439-01-140-9057

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Product Identification
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Product ID:INCONEL FILLER METAL 718

MSDS Date:01/01/1992

FSC:3439

NIIN:01-140-9057

MSDS Number: BPMKN

=== 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:30

4-526-5780

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

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Composition/Information on Ingredients
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Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 16%

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Fraction by Wt: 7%

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SHA PEL:10 MG/M3 TDUST
ACGIH TLV:5 MG/M3 FUME

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 2%
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 71%
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3

Ingred Name:TITANIUM OXIDE;(TITANIUM)
CAS:13463-67-7
RTECS #:XR2275000
Fraction by Wt: 3%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:SUPP DATA:WHEN METAL IS HEATED TO HIGH TEMP, FUMES PRODUCED
MAY BE DAMAGING TO LUNGS IF INHALED. FUMES FROM (ING 2)
RTECS #:9999999ZZ

Ingred Name:ING 6:CHROMIUM-CNTNG STAINLESS STEEL OR CERTAIN
CHROMIUM-CNTNG RODS CAN TRIGGER ECZEMATOUS ERUPTIONS ON PALMS (ING
8)
RTECS #:9999999ZZ

Ingred Name:ING 7:OF HANDS OF CHROMIUM SENSITIZED INDIV.IRON:INHAL OF
EXCESS FUMES/DUSTS CAN LEAD TO IRRIT OF RESP TRACT. (ING 9)
RTECS #:9999999ZZ

Ingred Name:ING 8:PRLNGD INHAL OF IRON OXIDE FOR PERIODS OF 6-10 YEARS
IS KNOWN TO

CAUSE SIDEROSIS WHICH APPEARS TO BE A (ING 10)
RTECS #:9999999ZZ

Ingred Name:ING 9:BENIGN PNEUMOCONIOSIS. PRLNGD EYE CNTCT W/METAL DUST
COULD CAUSE RUST BROWN COLORED SPOTS FORMING AROUND (ING 11)
RTECS #:9999999ZZ

Ingred Name:ING 10:PARTICLES & IF LEFT FOR SEV YEARS; PERM DMG COULD
RSLT. MANGANESE:EXCESS INHAL/INGEST OF MANGANESE CAN (ING 12)
RTECS #:9999999ZZ

Ingred Name:ING 11:PRODUCE MANGANESE POISONING.CHRONIC EXPOS CAN LEAD
TO NEUR PROBLEMS SUCH AS APATHY/DROWS/WEAKNESS, (IN
G 13)
RTECS #:9999999ZZ

Ingred Name:ING 12:SPASTIC GAIT, PARALYSIS, & OTHER NEUROLOGICAL
PROBLEMS RESEMBLING PARKINSONISM. THESE SYMPS CAN BE BECOME(ING 14)
RTECS #:9999999ZZ

Ingred Name:ING 13:PROGRESSIVE/PERM IF NOT TREATED. EXCESS INHAL OF
FUMES MAY CAUSE "METAL FUME FEVER" W/ITS FLU-LIKE SYMPS,(ING 15)
RTECS #:9999999ZZ

Ingred Name:ING 14:SUCH AS CHILLS, FEVER, BODY ACHES, VOMIT, SWEATING,
ETC. NICKEL:INHAL OF NICKEL POWDER HAS NOT RSLTD IN (ING 16)
RTECS #:9999999ZZ

Ingred Name:ING 16:INCR INCIDENCE OF MALIGNANT TUMORS IN RODENTS. RPTD
INTRATRACHEAL INSTILLATION OF NICKEL POWDER PRODUCED (ING 18)
RTECS #:9999999ZZ

Ingred Name:ING 17:AN INCR INCIDENCE OF MALIGNANT LUNG TUMORS IN RATS,
BUT DID NOT PRODUCE INCR INCIDENCE IN HAMSTERS WHEN (ING 19)
RTECS #:9999999ZZ

Ingred Name:ING 18:GIVEN AT MAX TOLERATED DOSE. HOWEVER, SINGLE
INTRATRACHEAL INSTILLATIONS OF NICKEL POWDER IN HAMSTERS (ING 20)
RTECS #:9999999ZZ

Ingred Name:ING 19:AT DOSES NEAR LD50 HAVE

PRODUCED INCR INCIDENCE OF
FIBROSARCOMAS, MESOTHELIOMAS & RHABDOMYOSARCOMAS. (ING 21)
RTECS #:9999999ZZ

Ingred Name:ING 20:INHAL OF NICKEL POWDER AT CONC 15 TIMES PEL
IRRITATED THE RESP TRACT IN RODENTS. KNOWN SENSITIZER & MAY (ING
22)
RTECS #:9999999ZZ

Ingred Name:ING 21:CAUSE ALLERGIC RXNS. TITANIUM:INHAL COULD CAUSE MILD
IRRIT TO RESP TRACT. INHAL OF TITANIUM DUST/FUME (ING 23)
RTECS #:9999999ZZ

Ingred Name:ING 22:COULD PRODUCE LUNG FIBROSIS & CHRONIC BRONCHITIS.
RTECS #:9
999999ZZ

Ingred Name:FIRST AID PROC:NOTED FROM ISOLATED INSTANCES OF EXCESS
EXPOS. INGEST:IF SYMPTOMS ARISE, GET MD.
RTECS #:9999999ZZ

Ingred Name:VENT:TO PROVISION OF ADEQUATE VENTILATION AND/OR AIR
SUPPLIED RESPIRATORS.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards A
cute and Chronic:AS SHIPPED, THESE ELECTRODES HAVE NO
KNOWN (UNLESS INGESTED) TOX PROPERTIES OTHER THAN CAUSING ALLERG
RXNS IN INDIV SENSITIVE TO METAL(S) CNTND IN THESE WELDING PRODS.
HAZS OF INGEST, IF ANY, ARE NOTE D UNDER SPECIFIC INGRED HAZS. USER
GENERATED DUSTS/FUMES MAY ON CNTCT W/SKIN/EYE PRODUCE MECH
IRRIT.(EFTS OF OVEREXP)
Explanation of Carcinogenicity:NICKEL:ANTICIPATED TO BE CARCINOGEN
(NPT), GROUP 2B (IARC).
Effects of Overexposure:HLTH HAZ: CHRONIC EXPOS C

OULD CAUSE DERM (SKIN OR CONJUNCT (EYES). EXCESS INHAL OF USER GENERATED FUMES FROM WELDING W/PRODS MAY, DEPENDING ON SPECIFIC FEATURES OF PROCESS USED, POSE LONG TERM HLTH HA Z. INGREDIENTS OF FUMES/GASES GENERATED IN USER WELDING OPERATIONS WILL DEPEND ON FILLER METAL ALLOY, BASE METAL, FLUX (SUPDAT)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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First Aid Measures
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First Aid:EYE:FLUSH W/CLEAN WATER FOR AT LEAST 15 MINS. IF IRRIT

PERSISTS, GET MD. SKIN:WASH W/SOAP & WATER. IF RASH DEVELOPS, GET MD. INHAL:MOVE FROM EXPOS. IF SEVERE RESP IRRIT PERSISTS, GET MD. EXCESS INHAL OF SOME METAL FUMES CAN PRODUCE ACUTE RXN SUCH AS "METAL FUME FEVER" W/SYMPMS OF CHILLS/FEVER SIMILAR TO FLU SYMPMS. SYMPMS APPEAR W/IN FEW HOURS OF EXPOS; BUT LONG TERM EFTS HAVE NOT BEEN (ING 24)

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Fire Fighting Measures
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Extinguishing Media:USE MEDIA SUITABLE FOR SURROUNDING FIRE .

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

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

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Accidental Release Measures
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Spill Release Procedures:VACUUM OR SHOVEL ANY SPILLED MATL INTO SUITABLE CNTNR. ALLOY WASTES ARE NORMALLY COLLECTED TO RECOVER METAL VALUES.

Neutralizing Agent:

NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage
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Handling and Storage Precautions:ALWAYS USE EXHAUST VENTILATION IN USER WELDING OPERATIONS.

Other Precautions:DO NOT EXPOSE SKIN OR EYES TO HEAT AND RADIATION FROM WELDING OPERATIONS.

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Exposure Controls/Personal Protection
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Respiratory Protection:RESP PROT NOT NEC WHEN EXPOS LIMITS OR AIRBORNE CONTAMINANTS EXCEEDED DURING WELDING W/THESE ELECTRO

DES. USE

NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IN CONFINED SPACES. USE ONLY NIOSH/MSHA APPRVD RESPS I/A/W 29CFR1910.134.

Ventilation:LOC EXHST WHEN WELDING. MAINTAIN EXPOS BELOW ACCEPTABLE EXPOS LIMITS. CONFINED SPACES REQ SPECIAL ATTENTION (ING 25)

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:WELDERS HELMET W/FILTER LENS .

Other Protective Equipment:FLAME RETARDANT CLOTHING.

Work Hygienic Practices:USE INDUSTRIAL HYGIENE AIR MONITORING TO ENSURE THAT YOUR USE OF M

ATERIAL DOES NOT CREATE EXPOS WHICH EXCEED REC LIMITS.

Supplemental Safety and Health

MELTING PT:>2552F,>1400C. EFTS OF OVEREXP:& SPECIFIC PROCESS BEING USED. INGREDIENTS MAY INCL METALS, METAL

OXIDES/CHROMATES/FLUORIDES/CO/OZONE/NO*X. PHOSGENE CAN BE PRODUCED IF CHLORINATED SOLV VAPS PRES ENT IN USER OPERS. CHROMIUM:NON-TOX.

CHROMIUM METAL/INSOLUBLE SALTS ARE SAID TO BE INVOLVED IN FIBROSIS OF LUNGS.(ING 6)

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

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Melt/Freeze Pt:M.P/F.P Text:>2552F,>140

Spec Gravity:8.9

Appearance and Odor:ODORLESS METALLIC SILVER COLORED WIRE

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===== 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:NONE SPECIFIED BY MANUFACTURER.

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

Waste Disposal Methods:IF DISPOSAL IS NEC

ESSARY, DISPOSE OF IN

ACCORDANCE WITH FEDERAL, STATE OR LOCAL REGULATIONS.

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