

INCO ALLOYS INTERNATIONAL INC -- MONEL ALLOY 401 -- 3439-00N034287

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

Product ID:MONEL ALLOY 401
MSDS Date:12/06/1991
FSC:3439
NIIN:00N034287
MSDS Number: BPWFL
=== Responsible Party ===
Company Name:INCO ALLOYS INTERNATIONAL INC
Address:3200 RIVERSIDE DRIVE
City:HUNTINGTON
State:WV
ZIP:25720
Country:US
Info Phone Num:304-526-5100
Emergency Phone Num:304-526-5780
CAGE:28553

=== Contractor Identification ===

Company Name:INCO ALLOYS INTERNATIONAL, INC. DIV INTL NICKEL CO
Address:3200 RIVERSIDE DR
City:HUNTINGTON
State:WV
ZIP:25705
Country:US
Phone:304-526-5100
CAGE:28553

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

Ingred Name:ING 8: UNTREATED, LEADS TO FATAL LIVER FAILURE. ING
2:EXCESSIVE INHAL/INGEST CAN PRDCE MANGANESE POIS. CHRONIC (ING 10)
RTECS #:9999999ZZ

Ingred Name:ING 9:EXPOS CAN LEAD TO NEUROLOGICAL PROBLEMS SUCH AS
APATHY, DROW,WEAK,SPASTIC GAIT, PARAL,& OTHER NEUROLOGICAL(ING 11)
RTECS #:9999999ZZ

Ingred Name:ING 10:PROBLEMS RESEMBLING PARKINSONISM. SYMP CAN BECOME
PROGRESSIVE & PERM IF NOT TREATED. EXCESSIVE INHAL OF (ING 12)
RTECS #:9999999ZZ

Ingred Name:ING 11:FUMES MAY CAUSE "METAL FUME FEVER" W/ITS FLU LIKE
SYMP, SUCH AS CHILLS, FEVER, BODY ACHES, VOMIT, SWEAT, (ING 13)
RTECS #:9999999ZZ

Ingred Name:ING 12:ETC.ING 3:EPIDEMIOLOGICAL STUDIES OF WORKERS EXPOS
TO NI POWDER & TO DUST & FUME GEN IN PRODUCTION OF NI (ING 14)
RTECS #:9999999ZZ

Ingred Name:ING 13:ALLOYS & OF STAINLESS STEEL HAVE NOT INDICATED
PRESENCE OF SIGNIFICANT RESP CANCER HAZ.INHAL OF NI POWDER(ING 15)
RTECS #:9999999ZZ

Ingred Name:ING 14: HAS NOT RSLTD IN AN INCR INCIDENCE OF MALIGNANT

TUMORS IN RODENTS. RPTD INTRATRACHEAL INSTILLATION OF NI (ING 16)
RTECS #:9999999ZZ

Ingred Name:ING 15:POWDER PRDCED AN INCR INCIDENCE OF MALIGNANT LUNG
TUMORS IN RATS, BUT DID NOT PRDCE AN INCR INCIDENCE IN (ING 17)
RTECS #:9999999ZZ

Ingred Name:ING 16: HAMSTERS WHEN ADMIN AT MAX TOLERATED DOSE. HOWEVER,
SINGLE INTRATRACHEAL INSTILLATIONS OF NI POWDER IN (ING 18)
RTECS #:9999999ZZ

Ingred Name:ING 17: HAMSTERS AT DOSES NEAR LD50 HAVE PRDCED AN INCR
INCIDENCE OF FIBROSARCOMAS, MESOTHELIOMAS & (ING 19)
RTECS #:9999999ZZ

Ingred Name:ING 18:RHABDOMYOSARCOMAS. INHAL OF NI POWDER AT CONC 15
TIMES PEL IRRIT RESP TRACT IN RODENTS.NI IS KNOWN SENSIT(ING 20)
RTECS #:9999999ZZ

Ingred Name:ING 19: AND MAY PRODUCE ALLERGIC REACTIONS.
RTECS #:9999999ZZ

Ingred Name:MELTING POINT: >2552F,>1400C.
RTECS #:9999999ZZ

Ingred Name:ING 7: VARIETY OF CLINICAL EFTS, ESPEC LIVER DISEASE &
NEUROLOGIC CHANGES. WILSON'S DISEASE IS PROGRESSIVE &, IF (ING 9)
RTECS #:9999999ZZ

Ingred Name:COPPER (SARA III)
CAS:7440-50-8
RTECS #:GL5325000
Fraction by Wt: 56%
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:MANGANESE CYCLOPENTADIENYL TRICARBONYL; (MANGANESE). LD50:
(ORAL,RAT) 9,000 MG/KG.
CAS:12079-65-1
RTECS #:009720000
Fraction by Wt: 2%
OSHA PEL:1 MG/M3;3 STEL (MN)
ACGIH TLV:5 MG/M3;3 STEL (MN)

Ingred Name:NICKEL (SARA III). LD50: (ORAL,RAT) >9,000 MG/KG.
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 43%
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3

Ingred Name:SUPP DATA:EXPOS TO METALLIC COPPER. IN EYES, COPPER METAL
AS FOREIGN BODY CAN PROVOKE AN INFLAM RXN RSLTG IN PUS (ING 5)
RTECS #:9999999ZZ

Ingred Name:ING 4:FORM IN CONJUNCTIVA, CORNEA/SCLERA. INGEST OF COPPER
METAL MAY CAUSE GI UPSET.WILSON'S DISEASE CAN OCCUR IN(ING 6)
RTECS #:9999999ZZ

Ingred Name:ING 5: CERTAIN INDIV W/RARE, INHERITED METABOLIC DISORDER
CHARACT BY RETENTION OF EXCESSIVE AMTS OF COPPER IN (ING 7)
RTECS #:9999999ZZ

Ingred Name:ING 6: LIVER, BRAIN, KIDNEYS & CORNEAS. THESE DEPOSITS
EVENTUALLY LEAD TO TISS NECROSIS & FIBROSIS, CAUSING A (ING 8)
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:SEE INGREDIENTS.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:AS, SHIPPED, COMPLEX ALLOYS HAVE NO
KNOWN TOX PROPERTIES OTHER THAN CAUSING ALLERGIC RXNS IN INDIV
SENSITIVE TO METAL(S) CONTAINED IN ALLOYS. HOWEVER, USER GEN DUSTS
& FUMES MAY ON CONT W/SKIN/EYES PR DCE MECH IRRIT. CHRONIC EXPOS
COULD CAUSE DERM (SKIN) OR CONJUNCT (EYES). EXCESSIVE INHAL OF USER
GEN (EFTS OF OVEREXP)
Explanation of Carcinogenicity:NICKEL: GROUP 2B (IARC); ANTICIPATED TO
BE A CARCINOGEN (NTP).
Effects of Overexposure:HLTH HAZ:FUMES FROM HIGH TEMP CUTTING/WELDING
OF ALLOYS MAY, DEPENDING ON SPECIFIC FEATURES OF PROCESS USED, POSE
A LONG TERM HLTH HAZ.ING 1:DUST & FUME MAY BE IRRIT TO RESP TRACT.
IN USER OPER WHERE COPPER FUME IS GEN,INHAL OF FUME CAN RSLT IN
SYMP OF "METAL FUME FEVER" SUCH AS CHILLS, FEVER & SWEATING. A FEW
(SUPDAT)
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYE: FLUSH PARTICLES FROM EYEBALLS WITH CLEAN WATER FOR AT
LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEEK MEDICAL HELP. SKIN:
WASH SKIN WITH SOAP AND WATER TO REMOVE ANY METALLIC PARTICLES. IF
RASH DEVELOPS, SEEK MEDICAL ATTENTION. INHALATION: REMOVE FROM
EXPOSURE. IF SEVERE RESPIRATORY IRRITATION PERSISTS, SEEK MEDICAL
HELP. INGESTION: IF SYMPTOMS OF INGESTION ARISE, SEEK MEDICAL HELP.

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

Flash Point:NONFLAMMABLE
Extinguishing Media:USE MEDIA SUITABLE FOR SURROUNDING FIRE CONDITIONS
.
Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA AND FULL
PROTECTIVE EQUIPMENT .
Unusual Fire/Explosion Hazard:SPARKS FROM WELDING OR GRINDING IN USER
OPERATIONS COULD IGNITE FLAMMABLE OR COMBUSTIBLE LIQUIDS, VAPORS
AND 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 =====

Handling and Storage Precautions:MAINTAIN EXPOSURE BELOW ACCEPTABLE EXPOSURE LEVELS.

Other Precautions:USE INDUS HYGIENE AIR MONITORING TO ENSURE THAT USE OF MATL DOES NOT CREATE EXPOS WHICH EXCEED RECOM EXPOS LIMITS. ALWAYS USE EXHST VENT IN USER OPER SUCH AS HIGH TEMP CUTTING, WELDING & GRINDING. REF ER TO ANSI Z49.1, THE AMERICAN (SUPDAT)

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

Respiratory Protection:RESPIRATORY PROTECTION IS NEC WHEN EXPOSURE LIMITS FOR AIRBORNE CONTAMINANTS ARE EXCEEDED DURING CUTTING, GRINDING/WELDING ON ALLOYS. USE NIOSH/MSHA APPRVD SUPP RESP IN CONFINED SPACES. USE NIOSH/MSHA APPRVD RESP I/A/W 29 CFR 1910.134.

Ventilation:USE LOC EXHST VENT WHEN CUTTING, GRINDING/WELDING. MAINTAIN EXPOS BELOW ACCEPTABLE EXPOS LIMITS.CONFINED SPACES (SUPDAT)

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:CHEMICAL WORKERS GOGGLES .

Other Protective Equipment:WEAR FACE PROTECTION AND FLAME RETARDANT CLOTHING. DO NOT EXPOS SKIN OR EYES TO HEAT AND RADIATION FROM WELDING OPER.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

APPEAR/ODOR: SHEET/SOME INTERMEDIATE FORM, ODORLESS. OTHER PREC: WELDING SOCIETY,P.O. BOX 351040, MIAMI,FL 33135. 29 CFR 1910, OSHA, U.S. DEPT OF LABOR, WASHINGTON,DC. 20210. VENT: REQ SPECIAL ATTN TO PROVISION OF ADEQ VENT. EFTS OF OVEREXP: INSTANCES OF ALLERGIC SKIN RASHES HAVE BEEN REPORTED IN WORKERS W/SKIN (ING 4)

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:ING 21

Spec Gravity:8-9 GM/CC

Appearance and Odor:SOLID SILVER-COLORED METAL SHAPED AS PLATE, BAR, WIRE, TUBE, ROD,STRIP, (SUPDAT

===== 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.

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

Waste Disposal Methods:DISPOSE IN ACCORDANCE WITH FEDERAL, STATE OR LOCAL REGULATIONS.

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