

INCO ALLOYS INTERNATIONAL, INC. -- MONEL,FERRY AND CUPRO 107 ALLOYS,K-500 --  
3040-01-151-7992

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

Product ID:MONEL,FERRY AND CUPRO 107 ALLOYS,K-500

MSDS Date:12/01/1990

FSC:3040

NIIN:01-151-7992

MSDS Number: BPMWK

=== Responsible Party ===

Company Name:INCO ALLOYS INTERNATIONAL, INC.

Address:GUYAN RIVERS ROAD

City:HUNTINGTON

State:WV

ZIP:25720

Country:US

Info Phone N

um:304-526-5100/800-624-3411

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:ALUMINUM (SARA III)

CAS:7429-90-5

RTECS #:BD0330000

Fraction by Wt: 3%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15MG/M3 DUST/5 FUME

ACGIH TLV

:10MG/M3 DUST; 9293

Ingred Name:COPPER (SARA III)  
CAS:7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 30%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2MG/M3 FUME; 9293  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:IRON  
CAS:65996-67-0  
Fraction by Wt: 1%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 1%  
Other REC Limits:NONE RECOMMENDED  
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: 64%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9293

Ingred Name:TITANIUM, METAL  
CAS:7440-32-6  
RTECS #:XR1700000  
Fraction by Wt: 1%  
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:TLV 10 MG/M3,METAL DUST/5 MG/M3 FUMES  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:Y

ES OSHA:NO

Health Hazards Acute and Chronic:ACUTE- AS SHIPPED, NO KNOWN HEALTH HAZARDS. FUMES/DUSTS CAN IRRITATE EYES, SKIN & RESPIRATORY SYSTEM. CHRONIC- INHALATION MAY CAUSE DROWSINESS, WEAKNESS, PARALYSIS, "METAL FUME FEVER", CHILLS, SWEATING, BODY ACHE, VOMITING. CAN CAUSE CONJUNCTIVITIS, DERMATITIS, PULMONARY FIBROSIS & EMPHYSEMA. WILSON'S DISEASE CAN OCCUR

Explanation of Carcinogenicity:CONTAINS NICKEL.

Effects of Overexposure:AS SHIPPED, NO KNOWN HEALTH HAZARDS.

FUMES/DUSTS CAN IRRITATE EYES, SKIN & RESPIRATORY SYSTEM. REPEATED INHALATION MAY CAUSE DROWSINESS, WEAKNESS, PARALYSIS, "METAL FUME FEVER", CHILLS, SWEATING, BODY ACHE, VOMITING. CAN CAUSE CONJUNCTIVITIS, DERMATITIS, PULMONARY FIBROSIS & EMPHYSEMA. WILSON'S DISEASE CAN OCCUR

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS SUCH AS DERMATITIS, RESPIRATORY PROBLEMS, LUNG DISEASE OR ANY CONDITION THAT MAY BE AGGRAVATED BY NUISANCE DUST OR FIBERS.

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

First Aid:GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. SKIN:WASH WITH SOAP & WATER. EYE:FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. INHALED:REMOVE TO FRESH AIR. PROVIDE OXYGEN/CPR IF NEEDED. ORAL:GET MEDICAL ATTENTION.

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

Flash Point:NON FLAMMABLE

Extinguishing Media:WATER, (CLASS A, B OR C), FOG OR FOAM. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:NON-FLAMMABLE. HOWEVER, 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:NOT APPLICABLE.

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===== Handling and Storage =====

Handling and Storage Precautions:STORAGE- AVOID CREATING DUST.

Other Precautions:DO NOT GENERATE DUST. AVOID BREATHING DUST OR FUME.  
DO NOT GET IN EYE, ON SKIN OR ON CLOTHING. KEEP OUT OF REACH OF CHILDREN.

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

Respiratory Protectio

n:USE NIOSH APPROVED SUPPLIED AIR RESPIRATORY

PROTECTION OR RESPIRABLE FUME RESPIRATOR WHEN WELDING, BRAZING OR SOLDERING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE B ELOW TLV.

Ventilation:LOCAL/GENERAL TO MAINTAIN PEL/TLV. CHECK LOCAL REGULATIONS FOR EMISSION STANDARDS.

Protective Gloves:LEATHER, COTTON OR RUBBER AS NEEDED

Eye Protection:DUST-RESISTANT SAFETY GOGGLES

Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER, WORK CLOTH

ING AND APRON AS REQUIRED. DO NOT WEAR CONTACT LENSES. APPLY SKIN CREAM.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

Supplemental Safety and Health

MAINTAIN EXPOSURES BELOW THE ACCEPTABLE EXPOSURE LEVELS.

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

HCC:N1

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

Spec Gravity:8 - 9

Solubility in Water:INSOLUBLE

Appearance and Odor:SILVER-COLORED METAL SHAPED AS PLATE,BAR,WIRE,TU

BE,ROD,STRIP ETC.. - ODORLESS

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

Stability Indicator/Materials to Avoid:YES

STRONG MINERAL ACIDS

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:TOXIC FUMES & GASES FROM WELDING, METAL OXIDES, CHROMATES, FLUORIDES, CO, CO2, OZONE & OXIDES OF NITROGEN.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERA

## L REGULATIONS.

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