NICKLE BASED ALLOY STEEL

MSDS Number

BKMPY

National Stock Number

3439-00N014938

Product Name

NICKLE BASED ALLOY STEEL

Manufacturer

A M CASTLE AND CO

Product Identification

Product ID:NICKLE BASED ALLOY STEEL
MSDS Date:01/03/1990
FSC:3439
NIIN:00N014938
MSDS Number: BKMPY

Responsible Party

A.M.CASTLE & CO.

3400 N. WOLF ROAD

FRANKLIN PARK , IL 60131

US

Emergency Phone: 312-455-7111 DAY 312-455-8986 NIGHT

Info Phone: 312-445-7111

Cage: 11045

Contractor

CASTLE A M AND CO

FRANKLIN PARK, IL 60131-1319

US

847-455-7111

Cage: 11045

Ingredients

YTTRIUM

CAS: 7440-65-5

RTECS: ZG2980000

OSHA PEL1 MG/M3

ACGIH TLV: 1 MG/M3; 9192

WORKERS MELTING & WORKING ALLOYS CONTAINING

RTECS: 9999999ZZ

ALUMINUM (SARA III)

CAS: 7429-90-5

RTECS: BD0330000

OSHA PEL15MG/M3 DUST/5 FUME

ACGIH TLV: 10MG/M3 DUST; 9192

CHROMIUM (SARA III)
CAS: 7440-47-3
RTECS: GB4200000
OSHA PEL1 MG/M3
ACGIH TLV: 0.5 MG/M3; 9192
EPA Report Quantity: 1 LB
DOT Report Quantity: 1 LB

COBALT (SARA III)
CAS: 7440-48-4
RTECS: GF8750000
OSHA PEL0.1 MG/M3;AS CO
ACGIH TLV: 0.05 MG/M3;DUST 9293

COPPER (SARA III)
CAS: 7440-50-8
RTECS: GL5325000
OSHA PEL0.1MG/M3 FUME/1 DUST
ACGIH TLV: 0.2MG/M3 FUME; 9192
EPA Report Quantity: 5000 LBS
DOT Report Quantity: 5000 LBS

IRON (FE)
CAS: 7439-89-6
OSHA PEL10 MG/M3 (FE)
ACGIH TLV: 5 MG/M3 (FE)

MANGANESE (SARA III)
CAS: 7439-96-5
RTECS: OO9275000
OSHA PEL(C) 5 MG/M3 DUST
ACGIH TLV: 5 MG/M3 DUST 9293

MOLYBDENUM
CAS: 7439-98-7
RTECS: QA4680000
OSHA PEL15 MG/M3 TDUST
ACGIH TLV: 10 MG/M3; 9293

NICKEL (SARA III)

CAS: 7440-02-0

RTECS: QR5950000

OSHA PEL1 MG/M3

ACGIH TLV: 1 MG/M3; 9192

NIOBIUM (NB)

CAS: 7440-03-1

OSHA PEL5 MG/M3 (MFR)

ACGIH TLV: 5 MG/M3 (MFR)

SILICON

CAS: 7440-21-3

RTECS: VW0400000

OSHA PEL15 MG/M3 TDUST

ACGIH TLV: 10 MG/M3 TDUST; 9293

TANTALUM

CAS: 7440-25-7

RTECS: WW5505000

OSHA PEL5 MG/M3

ACGIH TLV: 5 MG/M3; DUST; 9192

TITANIUM (TI)

CAS: 7440-32-6

RTECS: XR1700000

OSHA PEL10 MG/M3 TDUST (MFR)

ACGIH TLV: 10 MG/M3 TDUST (MFR)

TUNGSTEN

CAS: 7440-33-7

RTECS: YO7175000

OSHA PEL5 MG/M3/ 10 STEL

ACGIH TLV: 5 MG/M3/10 STEL;9192

Hazards

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:SHORT TERM EXPOSURE TO FUMES/DUST MAY PRODUCE IRRIT OF EYES & RESP SYSTEM. INHAL OF HIGH CONC OF FRESHLY FORMED OXIDE FUMES OF IRON, MANGANESE & COPPER MAY CAUSE METAL FUME FEVER CHARACTERIZED BY A ME TALLIC TASTE IN THE MOUTH, DRYNESS & IRRIT OF THROAT & INFLUENZALIKE SYMPTOMS. CHRONIC INHAL OF (SEE EFTS OF OVEREXP)
Explanation of Carcinogenicity:SEE EFTS OF OVEREXPOSURE.
Effects of Overexposure:HLTH HAZ: HIGH CONC OF IRON OXIDE FUMES OR DUST

MAY LEAD TO A BENIGN PNEUMOCONIOSIS (SIDEROSIS). INHAL OF HIGH CONC OF FERRIC OXIDE MAY ENHANCE THE RISK OF LUNG CANCER DEVELOPMENT IN WORKERS EXPOSED T O PULMONARY CARCINOGENS. CHROMIUM & NICKEL & CERTAIN OF THEIR COMPOUNDS ARE LISTED IN THE 5TH ANNUALREPORT (SUPP DATA)
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

First Aid

First Aid:IF EXPOSED TO EXCESSIVE LEVELS OF METAL FUMES, REMOVE TO FRESH AIR, SEEK MEDICAL AID IMMEDIATELY. EYES: FLUSH WITH WATER FOR AT LEAST 15 MINUTES. INGEST: CALL MD IMMEDIATELY . INHAL: REMOVE TO F RESH AIR. SUPPORT BREATHING (GIVE O*2/ARTF RESP) .

Fire Fighting

Flash Point:NONE
Extinguishing Media:NOT APPLICABLE.
Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT . STEEL PRODUCTS IN THE SOLID STATE PRESENT NO FIRE OR EXPLOSION HAZARD.
Unusual Fire/Explosion Hazard:NOT APPLICABLE.

Accidental Release

Spill Release Procedures:NOT APPLICABLE.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.
Other Precautions:IN WELDING, PRECAUTIONS SHOULD BE TAKEN FOR AIRBORNE CONTAMINANTS WHICH MAY ORIGINATE FROM COMPONENTS OF THE WELDING ROD. ARC OR SPARK GENERATED WHEN WELDING OR BURNING COULD BE A SOURCE OF IGNITION F OR COMBUSTIBLE AND FLAMMABLE MATLS.

Exposure Controls

Respiratory Protection:NIOSH/MSHA APPROVED DUST AND FUME, RESPIRATOR SHOULD BE USED TO AVOID EXCESSIVE INHALATION OF PARTICULATES WHEN EXPOSURE EXCEEDS TLV'S.
Ventilation:LOCAL EXHST VENT SHOULD BE UTILIZED WHEN WELDING, BURNING, SAWING, BRAZING, GRINDING/MACHINING WHEN EXPOS EXCEEDS TLV'S.
Protective Gloves:NONE SPECIFIED BY MANUFACTURER.
Eye Protection:CHEMICAL WORKERS GOGGLES .
Other Protective Equipment:OTHER PROTECTIVE EQUIPMENT SHOULD BE UTILIZED AS REQUIRED BY THE WELDING STANDARDS.
Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.
Supplemental Safety and Health
EFTS OF OVEREXP:ON CARCINOGENS,AS PREPARED BT NATL TOXICOLOGY PROGRAM(NTP)(NICKEL-2,CHROMIUM-1)IARC-NICKEL & CHROMIUM LIST 1.EXPOS TO HIGH CONC OF DUST & FUMES CAN CAUSE SENSIT DERMAT,INFLAM &/OR ULCE RATION OF UPPER RESP TRACT & POSSIBLY CANCER OF NASAL PASSAGES & LUNGS.RECENT EPIDEMIOLOGICAL STUDIES OF (SEE ING 15)

Chemical Properties

HCC:N1
Melt/Freeze Pt:M.P/F.P Text:>2300F
Spec Gravity: 7
Appearance and Odor:GRAY-BLACK, ODORLESS.

Stability

Stability Indicator/Materials to Avoid:YES
REACTS WITH STRONG ACIDS TO PRODUCE HYDROGEN GAS.
Stability Condition to Avoid:NOT APPLICABLE.
Hazardous Decomposition Products:METALLIC DUST OR FUMES MAY BE PRODUCED DURING WELDING, BURNING, GRINDING AND POSSIBLY MACHINING.

Disposal

Waste Disposal Methods:ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.