HIGH PERFORMANCE HEAT RESISTANCE ALLOY 1311

MSDS Number

BHBGB

National Stock Number

3439-00-171-1340

Product Name

HIGH PERFORMANCE HEAT RESISTANCE ALLOY 1311

Manufacturer

HAYNES INTERNATIONAL INC SUBS OF CABOT CORP

Product Identification

Product ID:HIGH PERFORMANCE HEAT RESISTANCE ALLOY 1311

MSDS Date: 03/01/1987

FSC:3439

NIIN:00-171-1340 MSDS Number: BHBGB

Responsible Party

HAYNES INTERNATIONAL INC., SUBS OF CABOT CORP.

1020 WEST PARK AVE.

KOKOMO, IN 46902-9013

US

Emergency Phone: 800-424-9300(CHEMTREC)/317-456-6000

Info Phone: 317-456-6000

Preparer: SAFETY DEPARTMENT

Cage: 80357

Contractor

SOONER SUPPLIES, INC. 405-273-3370

9013

KOKOMO, IN 46904-9013

US

318-263-2002;765-456-6614

Cage: 1L038

Ingredients

COBALT (SARA III)

CAS: 7440-48-4

RTECS: GF8750000

Fraction By Weight: 54%

OSHA PELO.1 MG/M3;AS CO

ACGIH TLV: 0.05 MG/M3;DUST 9293

CHROMIUM (SARA III)

CAS: 7440-47-3

RTECS: GB4200000

Fraction By Weight: 25.5%



OSHA PEL1 MG/M3

ACGIH TLV: 0.5 MG/M3; 9192 EPA Report Quantity: 1 LB DOT Report Quantity: 1 LB

IRON

CAS: 7439-89-6 RTECS: NO4565500

Fraction By Weight: 2.0% MAX

OSHA PEL10 MG/M3 ACGIH TLV: 5 MG/M3

MANGANESE (SARA III)

CAS: 7439-96-5 RTECS: 009275000

Fraction By Weight: 1.0% MAX
OSHA PEL(C) 5 MG/M3 DUST
ACGIH TLV: 5 MG/M3 DUST 9293

NICKEL (SARA III) CAS: 7440-02-0 RTECS: QR5950000

Fraction By Weight: 10.5%

OSHA PEL1 MG/M3

ACGIH TLV: 1 MG/M3; 9192

SILICON

CAS: 7440-21-3 RTECS: VW0400000

Fraction By Weight: 1.0% MAX OSHA PEL15 MG/M3 TDUST

ACGIH TLV: 10 MG/M3 TDUST; 9293

TUNGSTEN

CAS: 7440-33-7 RTECS: YO7175000

Fraction By Weight: 7.5%
OSHA PEL5 MG/M3/ 10 STEL

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

Hazards

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO



Health Hazards Acute and Chronic: HEALTH HAZARD TO LUNGS, SKIN AND CENTRAL NERVOUS SYSTEM.

Explanation of Carcinogenicity: CHROME IS A CONFIRMED CARCINOGEN BY NTP, IARC. NICKEL IS A CONFIRMED CARCINOGEN BY IARC AND AN ANTICIPATED CARC. BY NTP.

Effects of Overexposure:ACUTE:MECHANICAL INJURY TO THE EYE,SKIN IRRITATION,ALLERGIC SKIN REACTION,DERMATITIS.RESPIRATORY IRRITATION,COUGH,BRONCHITIS,CHILLS,FUME FEVER,AND ASTHMA-LIKE S HEART.CENTRAL NERVOUS SYSTEM DEPRESSION AND LUNG CANCER. Medical Cond Aggravated by Exposure:AGGRAVATION OF EXISTING RESPIRATORY OR ALLERGIC CONDITIONS.IF PRIOR DAMAGE HAS OCCURRED TO THE NEUROLOGIC,CIRCULATORY,HEMATOLOGIC OR RENAL SYSTEMS,MEDICALLY EVAULATE THESE INDIVIDUALS FOR EXPOSURE.

First Aid

First Aid:REMOVE FROM EXPOSURE AND OBTAIN PROMPT MEDICAL ATTENTION. IF NOT BREATHING, GIVE CPR/OXYGEN. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY AMERICAN RED CROSS.

Fire Fighting

Extinguishing Media: AS APPROPIATE FOR SURROUNDING FIRE. Fire Fighting Procedures: IF MATERIAL IS REDUCED TO POWDER, USE CAUTION TO PREVENT FIRE OR EXPLOSION. TO EXTINGUISH A METAL POWDER FIRE USE DRY SAND, DRY GRAPHITE OR OTHER CLASS "D" EXTING. Unusual Fire/Explosion Hazard: NONE.

Accidental Release

Spill Release Procedures:IF MATERIAL IS IN DUST FORM,USE VACUUM CLEANER WITH HIGH EFFICIENCY AIR FILTRATION SYSTEM.MINIMIZE DUST GENERATION.

Handling

Handling and Storage Precautions:STORE IN DRY AREA.DO NOT STORE NEAR ACIDS.FINE METAL POWDERS SHOULD BE KEPT AWAY FROM FLAMES AND IGNITION SOURCES.

Other Precautions:TRAIN WELDER TO KEEP HIS HEAD OUT OF THE FUMES.MONITOR AIR TO ENSURE ACCEPTABLE EXPOSURES.AVOID ELECTRICAL SHOCK BY MAINTAINING DRY WORK AREA.

Exposure Controls

Respiratory Protection: FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR.

Ventilation:LOCAL EXHAUST TO KEEP BELOW TLV.

Protective Gloves: WELDER'S GLOVES.

Eye Protection: HELMET OR FACE SHIELD WITH FILTER LENS. Other Protective Equipment: SUBSTANTIAL DARK CLOTH, ARM PROTECTOR, APRON, HAT AND SHOULDER PROTECTION.

Work Hygienic Practices: WASH HANDS THOROUGHLY BEFORE EATING, SMOKING OR

USING SANITARY FACILITIES. Supplemental Safety and Health NONE.

Chemical Properties

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:2425F,1329C

Solubility in Water: NONE.

Appearance and Odor: SOLID ROD 0.062 IN DIA. BY 36 IN LONG. SILVER GRAY COLOR. NO ODOR.

Stability

Stability Indicator/Materials to Avoid:YES

MINERAL ACIDS AND OXIDIZING AGENTS WHICH MAY GENERATE EXPLOSIVE HYDROGEN GAS.

Hazardous Decomposition Products: VARIOUS ELEMENTAL METALS AND METAL OXIDES.

Disposal

Waste Disposal Methods: CONSULT WITH YOUR LOCAL ENVIRONMENTAL



OFFICER.DISPOSE OF FUMES,FLUX OR WELD GRINDING RESIDUE FROM THE WORK AREA OR FROM FILTERS IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL ENVIRONMENTAL REGULATIONS.PRI OR TO DISPOSAL CONSIDER IF MTRL HAS RECOVERY VALUE

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