

HAYNES INTERNATIONAL INC.,SUBS OF CABOT CORP. -- HIGH PERFORMANCE HEAT RESISTANCE ALLOY 1311 -- 3439-00-171-1340

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===== 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 ===

Company Name:HAYNES INTERNATIONAL INC.,SUBS OF CABOT CORP.

Address:1020 WEST PARK AVE.

Box:9013

City:KOK

OMO

State:IN

ZIP:46902-9013

Country:US

Info Phone Num:317-456-6000

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

Preparer's Name:SAFETY DEPARTMENT

CAGE:80357

=== Contractor Identification ===

Company Name:HAYNES INTERNATIONAL INC SUB OF CABOT CORP

Address:1020 W PARK AVE

Box:9013

City:KOKOMO

State:IN

ZIP:46904-9013

Country:US

Phone:318-263-2002;765-456-6614

CAGE:80357

Company Name:SOONER SUPPLIES,INC. 405-273-3370

CAGE:1L038

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

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Ingred Name:COBALT (SARA III)

CAS:7440-48-4

RTECS #:GF8750000

Fraction by Wt: 54%

OSHA PEL:0.1 MG/M3;AS CO

ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 25.5%

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3; 9192

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

by Wt: 1.0% MAX
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: 10.5%
Other REC Limits:NOT ESTABL
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 1.0% MAX
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:TUNGSTEN
CAS:7440-33-7
RTECS #:YO7175000
Fraction by Wt: 7.5%
OSHA PEL:5 MG/M3/ 10 STEL
ACGIH TLV:5 MG/M3/10 STEL;9192

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

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
IRR
ITATION,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 Measures =====

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.

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Fire Fighting Measures
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Extinguishing Media:AS APPROPRIATE 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.

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

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Handling and Storage
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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.

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Exposure Controls/Personal Protection
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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.

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Physical/Chemical Properties
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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.

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Stability and Reactivity Data
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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 Considerations =====

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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