

BOB MARTIN COMPANY -- HASTELLOY W -- 3439-00-063-5203

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Product Identification  
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Product ID:HASTELLOY W

MSDS Date:04/01/1987

FSC:3439

NIIN:00-063-5203

MSDS Number: BCWXD

=== Responsible Party ===

Company Name:BOB MARTIN COMPANY

Address:2209 N SEAMAN AVENUE

City:SO. EL MONTE

State:CA

ZIP:91733

Info Phone Num:213-686-2220

Emergency Phone Num:213-686-2220

CAGE:JO950

=== Contractor Identifica

tion ===

Company Name:BOB MARTIN COMPANY

Address:2209 N SEAMAN AVENUE

Box:City:SO. EL MONTE

State:CA

ZIP:91733

Phone:213-686-2220

CAGE:JO950

Company Name:MARTIN BOB CO

Address:2209 N SEAMAN AVE

Box:City:SOUTH EL MONTE

State:CA

ZIP:91733-2630

Country:US

Phone:213-686-2220

CAGE:6K906

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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: 2.5% MAX

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: 5.0%  
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 OXIDE  
CAS:1309-37-1  
RTECS #:NO7400000  
Fraction by Wt: 6.0%  
OSHA PEL:10 MG/M3 (FE)  
ACGIH TLV:5 MG/M3(FE),B2; 9293

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 1.0% MAX  
Other REC Limits:1.0MG/M3(FUME),ACGIH  
OSHA PEL:(C) 5 MG/M3 DUST  
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:MOLYBDENUM  
  
CAS:7439-98-7  
RTECS #:QA4680000  
Fraction by Wt: 24%  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3; 9293

Ingred Name:NICKEL (SARA III)  
CAS:7440-02-0  
RTECS #:QR5950000  
Fraction by Wt: 63.0%  
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  
Other REC Limits:5.0MG/M3;RESP. DUST  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:VANADIUM (SARA III)  
CAS:7440-62-2  
RTECS #:YW1355000  
Fraction by Wt: 0.6% MAX  
Other REC

Limits:ABOVE FIG.FOR V\*20\*5  
OSHA PEL:C,0.5 MG V2O5/M3 RD  
ACGIH TLV:0.05 MG V205/M3;9293

Ingred Name:GRAPHITE, SYNTHETIC  
CAS:7440-44-0  
RTECS #:FF5250100  
Fraction by Wt: 0.12%  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:2 MG/M3 TDUST; 9293

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===== Hazards Identification =====  
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES  
Health Hazards Acute and Chronic:ACUTE:METALLIC TASTE,NAUSEA,CHEST  
TIGHTNESS,FEVER  
,DIZZINESS,DRYNESS,EYES,NOSE,THROAT  
IRRITATION,ALLERGIC SKIN REACTIONS,IRRITATION & DERMATITIS.  
CHRONIC:BRONCHIAL ASTHMA,LUNG FIBROSIS,PNEUMOCONIOSIS.L UNG  
CANCER(CR & NI EXPOSURE).CNS DEPRESSION(MN EXPOSURE),GI  
DISORDERS(FE EXPOSURE).  
Explanation of Carcinogenicity:CHROMIUM VI IS A HUMAN CARCINOGEN.  
CHROMIUM III IS A SUSPECTED HUMAN CARCINOGEN. NICKEL IS A SUSPECTED  
HUMAN CARCINOGEN.  
Effects of Overexposure:SEE HEALTH HAZARDS.  
Medical Cond Aggravated by Exposure:AGGRAVAT  
ION OF EXISTING RESPIRATORY  
OR ALLERGIC CONDITIONS.HIGHER LEVEL OF LUNG RELATED PROBLEMS AMONG  
SMOKERS.SCREEN INDIVIDUALS WITH NERVOUS,CIRCULATORY,BLOOD OR KIDNEY  
CONDITIONS.

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===== First Aid Measures =====  
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First Aid:REMOVE FROM EXPOSURE AND OBTAIN PROMPT MEDICAL ATTENTION.IF  
NOT BREATHING,GIVE CPR.IF UNCONSCIOUS,GIVE OXYGEN;SKIN:WASH WITH  
SOAP & WATER,IF IRR.PERSISTS,SEE DOCTOR;EYES:FLUSH WITH LARGE  
AMOUNTS OF WA TER.IF IRR.PERSISTS  
,SEE DOCTOR.DO NOT WEAR CONTACT  
LENSES;INGESTION:DRINK LARGE QUANTITIES OF WATER.INDUCE VOMIT,SEE  
DOCTOR IMMEDIATELY.

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===== Fire Fighting Measures =====  
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Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.  
Fire Fighting Procedures:IF THIS MATERIAL IS REDUCED TO POWDER  
FORM,CAUTION MUST BE USED TO PREVENT FIRE OR EXPLOSION. TO  
EXTINGUISH USE DRY SAND,DRY GRAPHITE,OR OTHER CLASS"D"EXTINGSHR  
Unusual Fire/Explosion Hazard:WELDING ARCS AN

D SPARKS CAN IGNITE  
COMBUSTIBLE PRODUCTS

===== Accidental Release Measures =====

Spill Release Procedures:IF IN SOLID FORM,SWEEP UP & PLACE IN APPROPRIATE DISPOSAL CONTAINER.IF IN POWDER FORM,VACUUM WITH HIGH EFF. PARTICULATE FILTRATION SYSTEM.MINIMIZE AIRBORNE GENERATION OF POWDER & AVOID WATER CONTAMINATION & PLACE IN APPROPRIATE DISPOSAL CONTAINER.

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

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/Personal Protection =====

Respiratory Protection:FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR IN CONFINED SPACES OR WHERE VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:LOCAL EXHAUST TO MAINTAIN 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,SHOULDER PROTECTION.

Work Hygienic Practices:WASH HANDS THOROUGHLY BEFORE EATING,SMOKING,USING SANITARY FACILITIES.

Supplemental Safety and Health

MSDS INFORMATION OBTAINED FROM MSDS BY CABOT OF 01NOV85,CAGE 7T173.

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:2400F,1316C

Spec Gravity:9.0

Solubility in Water:INSOLUBLE

Appearance and Odor:WELDING ROD,NO ODOR

OR

Percent Volatiles by Volume:NONE

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

Stability Indicator/Materials to Avoid:YES

MINERAL ACIDS & OXIDIZING AGENTS WHICH MAY GENERATE HYDROGEN GAS,WHICH IS EXPLOSIVE.

Hazardous Decomposition Products:FUMES OF METALS AND METAL OXIDES,CO,NO\*2,O\*3.

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

Waste Disposal Methods:DISPOSE OF FUMES,FLUX OR WELD GRINDING RESIDUE FROM THE WORK AREA OR FROM FILTERS

IAW ALL APPLICABLE FEDERAL,STATE AND LOCAL REGULATIONS.

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