

J.W.HARRIS CO.,INC. -- COBALT BASE ALLOY 188 (AMS5801) -- 3439-01-137-8524

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Product Identification
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Product ID:COBALT BASE ALLOY 188 (AMS5801)

MSDS Date:11/01/1985

FSC:3439

NIIN:01-137-8524

MSDS Number: BGNNS

=== Responsible Party ===

Company Name:J.W.HARRIS CO.,INC.

Address:10930 DEERFIELD ROAD

City:CINCINNATI

State:OH

ZIP:45242-4110

Info Phone Num:513-891-2000

Emergency Phone Num:513-

891-2000

CAGE:27911

=== Contractor Identification ===

Company Name:J. W. HARRIS CO., INC.

Address:10930 DEERFIELD ROAD

Box:City:CINCINNATI

State:OH

ZIP:45242-4110

Country:US

Phone:513-891-2000

CAGE:27911

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Composition/Information on Ingredients
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Ingred Name:NICKEL (SARA III)

CAS:7440-02-0

RTECS #:QR5950000

Fraction by Wt: 20-24%

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9192

Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 20-24%

OSHA PEL:

1 MG/M3
ACGIH TLV:0.5 MG/M3; 9192
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:TUNGSTEN
CAS:7440-33-7
RTECS #:YO7175000
Fraction by Wt: 13-16%
OSHA PEL:5 MG/M3/ 10 STEL
ACGIH TLV:5 MG/M3/10 STEL;9192

Ingred Name:IRON
CAS:7439-89-6
RTECS #:NO4565500
Fraction by Wt: 3.0% MAX
OSHA PEL:10MG/M*3 (IRON)
ACGIH TLV:5MG/M*3 (IRON)

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 1.25%MAX
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:SILICON
CAS:74
40-21-3
RTECS #:VW0400000
Fraction by Wt: 0.2-0.5%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:GRAPHITE, SYNTHETIC
CAS:7440-44-0
RTECS #:FF5250100
Fraction by Wt: .05-.15%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:2 MG/M3 TDUST; 9293

Ingred Name:COBALT (SARA III)
CAS:7440-48-4
RTECS #:GF8750000
Fraction by Wt: BALANCE
OSHA PEL:0.1 MG/M3;AS CO
ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:INGREDIENTS ABOVE ARE FOR THE SOLID ROD. INGREDIENTS BELOW
ARE FOR THE FLUX COATING ON TH

E ROD.
RTECS #:9999999ZZ

Ingred Name:TITANIUM DIOXIDE
CAS:13463-67-7
RTECS #:XR2275000
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)
CAS:1317-65-3
RTECS #:EV9580000
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9192

Ingred Name:CALCIUM FLUORIDE
CAS:7789-75-5
RTECS #:EW1760000
OSHA PEL:2.5 MG/M3 (F)
ACGIH TLV:2.5 MG/M3 (F); 8990

Ingred Name:ALUMINUM SODIUM FLUORIDE (SODIUM FLUOALUMINATE OR CRYOLITE)
CAS:15096-52-3
RTECS #:WA96250
00
OSHA PEL:2.5 MG/M3 (F)
ACGIH TLV:2.5 MG/M3 (F); 8990

Ingred Name:FELDSPAR
CAS:68476-25-5
ACGIH TLV:2MG/M*3

Ingred Name:CHROMIUM (III) OXIDE
CAS:1308-38-9
RTECS #:GB6475000
OSHA PEL:0.5 MG/M3 (CR)
ACGIH TLV:0.5 MG/M3 (CR); 8990

Ingred Name:POTASSIUM SILICATE
CAS:1312-76-1
ACGIH TLV:5MG/M*3

Ingred Name:SODIUM SILICATE
CAS:1344-09-8
ACGIH TLV:5MG/M*3

Ingred Name:POTASSIUM HYDROXIDE (SARA III)
CAS:1310-58-3
RTECS #:TT2100000
OSHA PEL:C, 2 MG/M3
ACGIH TLV:C 2 MG/M3; 9192
EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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

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:DISCOMFORT,DIZZINESS,NAUSEA,DRYNESS OR IRRITATION OF THE THROAT;LONG TERM EXPOSURE:PULMONARY IRRITATION,PNEUMOCONIOSIS.

Explanation of Carcinogenicity:CHROMIUM IS A HUMAN CARCINOGEN;NICKEL IS A SUSPECTED CARCINOGEN.

Effects of Ove

rexposure:SEE HEALTH HAZARDS.

Medical Cond Aggravated by Exposure:RESPIRATORY AILMENTS.

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

First Aid:REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR.

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

Extinguishing Media:APPROPRIATE FOR SURROUNDING FIRE.

Unusual Fire/Explosion Hazard:WELDING ARCS & SPARKS CAN IGNITE COMBUSTIBLE PRODUCTS.

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

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Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUE & PLACE IN APPROPRIATE DISPOSAL CONTAINER.

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===== 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.

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

Respiratory Protection:FUME RESPIRATOR OR AIR SUPPLIED RESPI

RATOR 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

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Physical/Chemical Properties

HCC:N1

Appearance and Odor:WELDING ROD 0.031 INCHES DIAMETER BY 36 INCHES LONG COATED WITH FLUX.

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Stability and Reactivity Data

Stability Indicator/Materials to Avoid:YES

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

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Disposal Considerations

Waste Disposal Methods:DISPOSE OF FUMES & OR WELD RESIDUE IAW ALL APPLICABLE FEDERAL,STATE & LOCAL REGULATIONS.

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