

UNITED STATES WELDING CORPORATION -- AMS5798 HASTELLOY X -- 3439-00-004-4548  
===== Product Identification =====

Product ID:AMS5798 HASTELLOY X

MSDS Date:01/06/1987

FSC:3439

NIIN:00-004-4548

MSDS Number: BKYGF

=== Responsible Party ===

Company Name:UNITED STATES WELDING CORPORATION

Address:20700 DEARBORN STREET

City:CHATSWORTH

State:CA

ZIP:91311

Info Phone Num:(818) 341-2021

Emergency Phone Num:(8

18) 341-2021

Preparer's Name:JORGE JACOBS

CAGE:58401

=== Contractor Identification ===

Company Name:UNITED STATES WELDING CORP

Address:3579 HWY 50 E SUITE 104

Box:City:CARSON CITY

State:NV

ZIP:89701-2807

Country:US

Phone:775-883-7878

CAGE:58401

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

Ingred Name:NICKEL (SARA III)

CAS:7440-02-0

RTECS #:QR5950000

Other REC Limits:1 MG/CUM

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: 22%  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3; 9192  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:COBALT (SARA III)  
CAS:7440-48-4  
RTECS #:GF8750000  
Fraction by Wt: 1.5%  
Other REC Limits:0.05 PPM  
OSHA PEL:0.1 MG/M3;AS CO  
ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:MOLYBDENUM  
CAS:7439-98-7  
RTECS #:QA4680000  
Fraction by Wt: 9%  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3; 9293

Ingred Name:TUNGSTEN  
CAS:7440-33-7  
RTECS #:YO7175000  
Fraction by Wt: 0.6%  
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: 18.5%

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES  
Health Hazards Acute and Chronic:INHALATION: DISCOMFORT, DIZZINESS,  
NAUSEA, DRYNESS OR IRRITATION OF NOSE/THROAT, WATERY EYES,  
HEADACHE, BREATHING DIFFICULTY, COUGHING, CHEST PAINS, PULMONARY  
EDEMA,

ASPHYXIATION, NEUROLOGICAL DAMAGE, LUNG FIBROSIS,  
PNEUMOCONIOSIS, OTHER LUNG DISEASES, & FATAL. SKIN: IRRITATION.

Explanation of Carcinogenicity:NICKEL IS SUSPECTED TO BE A HUMAN  
CARCINOGEN BY ACGIH.

Effects of Overexposure:INHALATION: DISCOMFORT, DIZZINESS, NAUSEA,  
DRYNESS OR IRRITATION OF NOSE/THROAT, WATERY EYES, HEADACHE,  
BREATHING DIFFICULTY, COUGHING, CHEST PAINS, PULMONARY EDEMA,  
ASPHYXIATION, NEUROLOGICAL DAMAGE, LUNG FIBROSIS, PNEUMOCONIOSIS,  
OTHER LUNG DISEASES  
, & FATAL. SKIN: IRRITATION.

Medical Cond Aggravated by Exposure:IMPAIRED PULMONARY FUNCTION, AIRWAY  
DISEASES SUCH AS ASTHMA, EMPHYSEMA, & CHRONIC BRONCHITIS.

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

First Aid:EYES: FLUSH W/PLENTY OF WATER. SKIN: WASH W/SOAP OR MILD  
DETERGENT FOR 5 MINS. INHALATION: REMOVE TO FRESH AIR. GIVE CPR OR  
OXYGEN IF NEEDED. INGESTION: OBTAIN MEDICAL ATTENTION IN ALL CASES.

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

Extinguishing Media:DRY CHEMICAL

Fire Fighting Procedures:SOLID FORM IS NOT COMBUSTIBLE UNDER NORMAL  
CONDITIONS, USE FIRE FIGHTING METHODS THAT ARE APPROPRIATE FOR THE  
SURROUNDING FIRE.

Unusual Fire/Explosion Hazard:MOLTEN METAL ALLOYS MAY EXPLODE WHEN ON  
CONTACT W/WATER, THEY MAY ALSO REACT VIOLENTLY W/WATER, RUST, &  
CERTAIN METAL OXIDES (OXIDES OF COPPER, IRON & LEAD).

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

Spill Release Procedures:

IN SOLID FORM THIS MATERIAL POSES NO SPECIAL  
CLEAN-UP PROBLEMS. PRIOR TO DISPOSAL CONSIDER IF MATERIAL HAS  
RECOVERY VALUE.

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

Respiratory Protection:USE NIOSH APPROVED RESPIRATOR.

Ventilation:PROVIDE LOCAL EXHAUST VENTILATION TO KEEP