

ESCO CORP -- STAINLESS STEEL 2XX TO 5XX SERIES -- 4710-00-488-1133

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Product Identification  
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Product ID:STAINLESS STEEL 2XX TO 5XX SERIES

MSDS Date:03/15/1988

FSC:4710

NIIN:00-488-1133

MSDS Number: BPVNJ

=== Responsible Party ===

Company Name:ESCO CORP

Address:2141 NW 25TH AVE

Box:10123

City:PORTLAND

State:OR

ZIP:97210

Country:US

Info Phone Num:503-228-2141

Emergency Phone Num:503-228-21

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CAGE:72113

=== Contractor Identification ===

Company Name:ESCO CORP

Address:2141 NW 25TH AVE

Box:10123

City:PORTLAND

State:OR

ZIP:97210

Country:US

Phone:503-228-2141

CAGE:72113

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Composition/Information on Ingredients  
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Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Fraction by Wt: 0-90%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG/M3

ACGIH TLV:10 MG/M3 AS FE2O3

Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 0-30%

Other REC L

imits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3; 9293  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:NICKEL (SARA III)  
CAS:7440-02-0  
RTECS #:QR5950000  
Fraction by Wt: 0-999.5%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9293

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 0-15%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:(C) 5 MG/M3 DUST  
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fracti  
on by Wt: 0-3%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MOLYBDENUM  
CAS:7439-98-7  
RTECS #:QA4680000  
Fraction by Wt: 0-5%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3; 9293

Ingred Name:SELENIUM (SARA III)  
CAS:7782-49-2  
RTECS #:VS7700000  
Fraction by Wt: 0-1%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.2 MG/M3  
ACGIH TLV:0.2 MG/M3; 9293  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:COBALT (SARA III)  
CAS:

7440-48-4  
RTECS #:GF8750000  
Fraction by Wt: 0-1%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1 MG/M3;AS CO  
ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:COPPER (SARA III)  
CAS:7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 0-5%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2MG/M3 FUME; 9293  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:TITANIUM, METAL  
CAS:7440-32-6  
RTECS #:XR1700000  
Fraction by Wt: 0-6%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:ALUMINUM (SARA III)  
CAS:7429-90-5  
RTECS #:BD0330000  
Fraction by Wt: 0-4.25%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15MG/M3 DUST/5 FUME  
ACGIH TLV:10MG/M3 DUST; 9293

Ingred Name:VANADIUM (SARA III)  
CAS:7440-62-2  
RTECS #:YW1355000  
Fraction by Wt: 0-1.1%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:C,0.5 MG V2O5/M3 RD  
ACGIH TLV:0.05 MG V2O5/M3;9293

Ingred Name:TUNGSTEN  
CAS:7440-33-7  
RTECS #:YO7175000  
Fraction by Wt: 0-2%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:5 MG/M3/ 10 STEL  
ACGIH TLV:5 MG/M3/10 STE

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===== 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:IN THE NATURAL STATE, STEEL PRODUCT DO  
NO PRESENT INHALATION, INGESTION OR CONTACT HEALTH HAZARDS.  
HOWEVER, WELDING, BURNING, GRINDING, BRAZING, SAWING OR MACHINING  
CAN RESULT IN THE GENERATION OF FUMES & DUST PARTICULATES.  
IRRITATION OF EYES, NOSE, & THROAT  
MAY RESULT FROM EXCESSIVE  
EXPOSURE TO METAL FUMES & DUST.  
Explanation of Carcinogenicity:CHROMIUM, VANADIUM AND NICKEL ARE  
CONSIDERED AS CARCINOGEN OR POTENTIAL HUMAN CARCINOGENS.  
Effects of Overexposure:METAL FUME FEVER MAY-A METALLIC TASTE IN MOUTH,  
IRRITATION AND DRYNESS OF MUCOUS MEMBRANES, FEVER AND CHILLS  
USUALLY LASTING 12 TO 48 HOURS ARE TYPICAL SYMPTOMS COMMONLY  
ASSOCIATED WITH METAL FUME FEVER.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INHALATION-IF IRRITATION OR PULMONARY SYMPTOMS DEVELOP,  
CONSULT A PHYSICIAN. EYE/SKIN-IF IRRITATION DEVELOPS, CONSULT A  
PHYSICIAN. INGESTION-IF CONSUMED WATER CONTAINING METAL PARTICULES,  
CONSULT A PHYSICIAN.

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

Extinguishing Media:NO FIRE OR EXPLOSION HAZARD.

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

Respiratory Protection:USE NIOSH APPROVED PARTICULATE AND/OR ACID FUME  
RESPIRATOR IF THE CONCENTRATION OF ACTUAL OR POTENTIAL AIRBORNE  
CONTAMINANTS EXCEEDS, OR IS ANTICIPATED TO EXCEED, THE EXPOSURE  
LIMITS.  
Ventilation:FUMES & WASTE GASES SHOULD BE REMOVED BY LOCAL EXHAUST  
VENTILATION. IF NOT ADEQUATE, USE A HIGH LEVEL POWER VENTILATION.  
Protective Gloves:USE PROTECTIVE GLOVES  
Eye Protection:USE EYE PROTECTION  
Other Protective Equipment:USE SAFETY GOGGLES, GLASSES, BOOTS, APRONS,  
HELM

ET, HAND SHIELD, EARPLUGS & MUFFS AS NEEDED TO PROTECT WORKERS.  
Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING AND BEFORE  
EATING, DRINKING OR SMOKING.

Supplemental Safety and Health

NONE

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

HCC:N1

Spec Gravity:7

Appearance and Odor:ODORLESS SOLID WITH METALLIC LUSTRE.

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

Stability Indicator/Materials to Avoid:YES

NONE

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:FUMES AND DUSTS OF IRON OXIDE AND  
MANGANESE.

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