

# **STAINLESS STEEL**

## **MSDS Number**

**BYTJB** 

#### **National Stock Number**

9530-00D004848

### **Product Name**

STAINLESS STEEL

#### Manufacturer

A M CASTLE AND CO

## **Product Identification**

Product ID:STAINLESS STEEL MSDS Date:11/25/1985 FSC:9530 NIIN:00D004848

MSDS Number: BYTJB **Responsible Party** 

## A.M.CASTLE & CO.

3400 N. WOLF ROAD

FRANKLIN PARK, IL 60131

US

Emergency Phone: 312-455-7111 DAY 312-455-8986 NIGHT

Info Phone: 312-445-7111

Cage: 11045

Contractor

# DRESSER INDUSTRIES, INSTRUMENT DIV.

STRATFORD, CT 06497-5145

203-385-0472

US

Cage: 38056

## **Ingredients**

NIOBIUM (ALSO CALLED COLUMBIUM)

CAS: 7440-03-1 Fraction By Weight:

NITROGEN

CAS: 7727-37-9 RTECS: QW9700000 Fraction By Weight:

raction by weight

ACGIH TLV: ASPHYXIANT; 9495

TIN

CAS: 7440-31-5 RTECS: XP7320000 Fraction By Weight:



OSHA PEL2 MG/M3

ACGIH TLV: 2 MG/M3; 9495

**IRON** 

CAS: 7439-89-6 RTECS: NO4565500

Fraction By Weight: 60-88%

CHROMIUM (SARA 313) (CERCLA)

CAS: 7440-47-3 RTECS: GB4200000

Fraction By Weight: 10-30%

OSHA PEL1 MG/M3

ACGIH TLV: 0.5 MG/M3; 9495 EPA Report Quantity: 1 LB DOT Report Quantity: 1 LB

NICKEL (SARA 313) (CERCLA)

CAS: 7440-02-0

RTECS: QR5950000

Fraction By Weight: 0-27%

OSHA PEL1 MG/M3

ACGIH TLV: 1 MG/M3; 9495

MANGANESE (SARA 313)

CAS: 7439-96-5 RTECS: 009275000 Fraction By Weight:

OSHA PELC 5 MG/M3 DUST

ACGIH TLV: 5 MG/M3 DUST 9495

MOLYBDENUM

CAS: 7439-98-7

RTECS: QA4680000

Fraction By Weight:

OSHA PEL10 PPM.

ACGIH TLV: 10 PPM.

COPPER (SARA 313) (CERCLA)

CAS: 7440-50-8 RTECS: GL5325000



Fraction By Weight:

OSHA PEL0.1MG/M3 FUME/1 DUST ACGIH TLV: 0.2 MG/M3 FUME; 9495

EPA Report Quantity: 5000 LBS DOT Report Quantity: 5000 LBS

TITANIUM,

CAS: 7440-32-6

RTECS: XR1700000

Fraction By Weight:

PHOSPHORUS, AMORPHOUS, RED

CAS: 7723-14-0 RTECS: TH3495000 Fraction By Weight:

EPA Report Quantity: 1 LB DOT Report Quantity: 1 LB

**SULFUR** 

CAS: 7704-34-9

RTECS: WS4250000 Fraction By Weight:

SILICON

CAS: 7440-21-3 RTECS: VW0400000 Fraction By Weight:

OSHA PEL15 MG/M3 TDUST

ACGIH TLV: 10 MG/M3 TDUST; 9495

#### **CARBON**

Fraction By Weight:

## **Hazards**

LD50 LC50 Mixture: PRODUCT'S LD50 (ORAL RAT) WAS NOT STATED

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:NO OSHA:NO

Health Hazards Acute and Chronic:STEEL PRODUCTS IN THE NATURAL STATE DO NOT PRESENT AND INHALATION, INGESTION OR CONTACT HAZARD. HOWEVER OPERATIONS SUCH AS BURNING, WELDING, SAWING, BRAZING & GRINDING MAY RELEASE FUMES &/OR DUSTS WHI CH MAY PRESENT HEALTH HAZARDS IF TLV'S

ARE EXCEEDED. CHRONIC INHALATION MAY LEAD TO SIDEROSIS. Explanation of Carcinogenicity: EPIDEMIOLOGICAL STUDIES OF WORKERS

MELTING & WORKING W/NICKEL & CHROMIUM CONTAINING ALLOYS ARE NOT AT

INCREASED RISK.

Effects of Overexposure:METAL FUME FEVER (FROM INHALATION OF IRON):METALLIC TASTE IN MOUTH,DRY IRRITATED THROAT,CHILLS,FLU-LIKE SYMPTOMS.

Medical Cond Aggravated by Exposure: MFR GAVE NO INFORMATION ON MSDS.

## First Aid

First Aid: IF EXPOSED TO EXCESSIVE LEVELS OF METAL FUMES, REMOVE TO



FRESH AIR, SEEK MEDICAL AID IMMEDIATELY. EYES - FLUSH W/WATER FOR AT LEAST 15 MIN.

## Fire Fighting

Fire Fighting Procedures: STEEL PRODUCTS IN THE SOLID STATE PRESENT NOT FIRE OR EXPLOSION HAZARD.

#### **Accidental Release**

Spill Release Procedures: MFR GAVE NO INFORMATION ON MSDS. Neutralizing Agent: MFR GAVE NO INFORMATION ON MSDS.

#### Handling

Handling and Storage Precautions: IN WELDING, PRECAUTIONS SHOULD BE TAKEN FOR AIRBORNE CONTAMINANTS WHICH MAY ORIGINATE FROM COMPONENTS OF THE WELDING ROD.

Other Precautions: ARC OR SPARK GENERATED WHEN WELDING OR BURNING COULD BE A SOURCE OF IGNITION FOR COMBUSTIBLE & FLAMMABLE MATERIALS.

### **Exposure Controls**

Respiratory Protection: NIOSH/MSHA - APPROVED DUST & FUME RESPIRATOR SHOULD BE USED TO AVOID EXCESSIVE INHALATION OF PARTICULATES WHEN EXPOSURE EXCEEDS TLV'S.

Ventilation:USE LOCAL VENTILATION WHEN WELDING, BURNING, SAWING, BRAZING, GRINDING OR MACHINING WHEN EXPOSURE EXCEEDS TLV'S.

Protective Gloves: MFR GAVE NO INFORMATION ON MSDS.

Eye Protection: SAFETY GLASSES OR GOGGLES

Other Protective Equipment: OTHER PROTECTIVE EQUIPMENT SHOULD BE

UTILIZED AS REQUIRED BY THE WELDING STANDARDS.

Work Hygienic Practices: MFR:? HMIS: USE GOOD INDUSTRIAL HYGIENE PRACTICES FOR WELDING. MINIMIZE CONTACT & WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

THIS MSDS COVERS TYPES 3XX SERIES, 4XX SERIES.

#### **Chemical Properties**

HCC:N1

NRC/State Lic Num: NONE

Melt/Freeze Pt:M.P/F.P Text:>2500F,>137

Spec Gravity: APPROX. 7

Evaporation Rate & Reference: NEGLIGIBLE

Solubility in Water: NEGLIGIBLE

Appearance and Odor: GRAY-BLACK SOLID, NO ODOR

#### **Stability**

Stability Indicator/Materials to Avoid:YES

REACTS WITH STRONG ACID TO PRODUCE HYDROGEN GAS.

Hazardous Decomposition Products: METALLIC DUST OR FUMES MAY BE PRODUCED DURING WELDING, BURNING, GRINDING & POSSIBLY MACHINING. SEE ANSI Z49.1.

Conditions to Avoid Polymerization: MFR GAVE NO INFORMATION ON MSDS.

#### Disposal

Waste Disposal Methods: DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS

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