# CARBON STEEL HR & CR, A36

## **MSDS Number**

**BLCCW** 

## **National Stock Number**

9530-00N017177

## **Product Name**

CARBON STEEL HR & CR, A36

#### Manufacturer

A M CASTLE AND COMPANY

## **Product Identification**

Product ID:CARBON STEEL HR & CR, A36 MSDS Date:03/01/1990 FSC:9530 NIIN:00N017177 MSDS Number: BLCCW

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## Responsible Party

A M CASTLE & COMPANY

3400 NORTH WOLF RD

FRANKLIN PARK , IL 60131

US

Emergency Phone: 708-455-7111

Info Phone: 708-455-7111

Cage: 11045

Contractor

CASTLE A M AND CO

FRANKLIN PARK, IL 60131-1319

US

847-455-7111 Cage: 11045

## **Ingredients**

IRON. PEL AND TLV AS IRON OXIDE (FUME)

CAS: 7439-89-6 RTECS: NO4565500

Fraction By Weight: 97-99% OSHA PEL10 MG(FE)/M3 TDUST

ACGIH TLV: 5 MG(FE)/M3

MANGANESE (SARA III)

CAS: 7439-96-5 RTECS: OO9275000 Fraction By Weight:

OSHA PEL(C) 5 MG/M3 DUST ACGIH TLV: 5 MG/M3 DUST 9293



GRAPHITE, SYNTHETIC

CAS: 7440-44-0 RTECS: FF5250100 Fraction By Weight:

OSHA PEL15 MG/M3 TDUST

ACGIH TLV: 2 MG/M3 TDUST; 9293

ALUMINUM (SARA III)

CAS: 7429-90-5 RTECS: BD0330000 Fraction By Weight:

OSHA PEL15MG/M3 DUST/5 FUME ACGIH TLV: 10MG/M3 DUST; 9192

PHOSPHOROUS (YELLOW) (SARA III)

CAS: 7723-14-0 RTECS: TH3500000 Fraction By Weight: OSHA PEL0.1 MG/M3

ACGIH TLV: 0.1 MG/M3; 9192 EPA Report Quantity: 1 LB DOT Report Quantity: 1 LB

SULFUR. PEL AND TLV AS SO\*2.

CAS: 7704-34-9 RTECS: WS4250000 Fraction By Weight:

OSHA PEL2 PPM; 5 PPM STEL ACGIH TLV: 2 PPM; 5 PPM STEL

SILICON

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

OSHA PEL15 MG/M3 TDUST

ACGIH TLV: 10 MG/M3 TDUST; 9293

VANADIUM PENTOXIDE (SARA III)

CAS: 1314-62-1 RTECS: YW2460000



Fraction By Weight:

OSHA PELC, 0.5 MG/M3

ACGIH TLV: 0.05 MG/M3RDUST;9293

EPA Report Quantity: 1000 LBS DOT Report Quantity: 1000 LBS

**COLOMBIAN** 

CAS: 7440-03-1

Fraction By Weight:

**BISMUTH** 

CAS: 7440-69-9

RTECS: EB2600000

Fraction By Weight:

LEAD (SARA III)

CAS: 7439-92-1

RTECS: 0F7525000

Fraction By Weight:

OSHA PEL0.05 MG/M3;1910.1025

ACGIH TLV: 0.15 MG/M3;DUST 9192

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

WELDING/SAWING, BRAZING & GRINDING MAY RELEASE

RTECS: 9999999ZZ

#### **Hazards**

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation: NO Skin: NO Ingestion: NO Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO

Health Hazards Acute and Chronic:SHORT TERM EXPOSURE TO FUMES/DUST MAY PRODUCE IRRITATION OF EYES AND RESPIRATORY SYSTEM. INHALATION OF HIGH CONCENTRATIONS OF FRESHLY FORMED OXIDE FUMES OF IRON, MANGANESE AND LEAD MAY CAUSE METAL FUM E FEVER CHARACTERIZED BY METALLIC TASTEIN MOUTH AND IRRITATION OF THROAT & INFLUENZA-LIKE SYMPTOMS. (EFTS OF OVEREPX)

Explanation of Carcinogenicity: NOT RELEVANT.

Effects of Overexposure: HLTH HAZ: CHRONIC INHAL OF HIGH CONCENTRATIONS OF IRON OXIDE FUMES OR DUST MAY LEAD TO BENIGN PNEUMOCONIOSIS (SIDEROSIS). INHAL OF HIGH CONC OF FERRIC OXIDE MAY POSS ENHANCE RISK OF LUNG CANCER DEVELOP MENT IN WORKERS EXPOSED TO PULMONARY CARCINOGENS. INHAL/INGEST OF LEAD PARTICLES MAY RESULT IN LEAD-INDUCED (SUPP DATA)

Medical Cond Aggravated by Exposure: NONE SPECIFIED BY MANUFACTURER.

## First Aid

First Aid:INHAL:IF EXPOSED TO EXCESSIVE LEVELS OF METAL FUMES, REMOVE TO FRESH AIR, GET MD IMMED. EYE:FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. INGEST:CALL MD IMMEDIATELY.

## Fire Fighting

Extinguishing Media:USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING FIRE .

Fire Fighting Procedures: STEEL PRODUCTS IN THE SOLID STATE PRESENT NO



FIRE OR EXPLOSION HAZARD. WEAR NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT

#### **Accidental Release**

Spill Release Procedures: NOT APPLICABLE.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

## 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 AND FLAMMABLE MATERIALS.

## **Exposure Controls**

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

Ventilation:LOC EXHST VENT SHOULD BE UTILIZED WHEN WELDING, BURNING, SAWING, BRAZING, GRINDING/MACHINING WHEN EXPOSURE EXCEEDS TLV'S Protective Gloves:NONE SPECIFIED BY MANUFACTURER.

Eye Protection: CHEMICAL WORKERS GOGGLES .

Other Protective Equipment: AS REQUIRED BY WELDING STANDARDS.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

EFTS OF OVEREXP: SYSTEMIC TOX. SYMPS OF LEAD POISONING INCLUDE ABDOMINAL CRAMPS, ANEMIA, MUSCLE WEAKNESS & HDCH. PRLNGD EXPOS CAN CAUSE BEHAVIORAL CHANGES, KIDNEY DMG, CNS DMG & REPRO EFTS. STEEL PRODS IN NATURAL STATE DO NOT PRESENT AN INHAL, INGEST OR CONTACT HAZ. HOWEVER, OPERATIONS SUCH AS BURNING, (SEE ING 12)

## **Chemical Properties**

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:>2500F Spec Gravity:APPROXIMATELY 7

Appearance and Odor: GRAY-BLACK SOLID, ODORLESS.

## Stability

Stability Indicator/Materials to Avoid:YES REACTS WITH STRONG ACIDS TO PRODUCE HYDROGEN GAS. Hazardous Decomposition Products:METALLIC DUST OR FUMES MAY BE PRODUCED DURING WELDING, BURNING, GRINDING AND POSSIBLY MACHINING. REFER TO ANSI Z49.1

## **Disposal**

Waste Disposal Methods: DISPOSAL MUST IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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