

# MATERIAL SAFETY DATA SHEET

# HOT ROLLED CARBON STEEL MERCHANT BARS

## SECTION I - MATERIAL IDENTIFICATION

**Manufacturer's Name**

Gerdau AmeriSteel

**Contact**

Matt D. Moore  
Director, Safety & Health

**Address**

P. O. Box 31328  
Tampa, FL 33631-3328

**Product**

Hot Rolled Carbon Steel Merchant Bars (Angles, Flats, Rounds, Channels, Squares)

**Emergency Telephone Number**

813/286-8383

**Telephone Number for Information**

813/286-8383

**Chemical Name**

Iron and Various Alloys

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<u>Hazardous Components (Common Name)</u>	<u>CAS No.</u>	<u>OSHA PEL (mg/m<sup>3</sup>)</u>	<u>ACGIH TLV (mg/m<sup>3</sup>)</u>	<u>Other Limits Recommended</u>	<u>% (optional)</u>
Iron (as Iron Oxide fume)	1309-37-1	10.0	5.0	n/a	97.0
Carbon (as Carbon Dioxide)	124-38-9	9,000.0	9,000.0	n/a	0.9
Manganese	7439-96-5	5.0	0.2	n/a	2.0
Phosphorous (yellow)	7723-14-0	0.1	0.1	n/a	0.06
Sulfur (as Sulfur Dioxide)	7446-09-5	13.0	2.0	n/a	0.08
Silicon	7740-21-3	(Total Dust) 15.0	(TWA) 10.0	n/a	0.4
Copper (as fume)	7440-50-8	0.1	0.2	n/a	1.5
Vanadium (as fume)	1314-62-1	0.05	0.05	n/a	0.05
Nickel	7440-02-0	1.0	1.5	n/a	0.5
Tin (inorganic)	7740-31-5	2.0	2.0	n/a	0.08

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

**Boiling Point** - N/A

**Vapor Pressure** - N/A

**Specific Gravity** - 7

**Melting Point** - 2600-2800 degrees

**Vapor Density** - N/A

**Percent Volatiles** - N/A

**Solubility in H<sub>2</sub>O** - N/A

**Evaporation Rate** - N/A

**Appearance and Odor** - Gray Solid/Odorless

**Physical State** - Solid

## SECTION IV - HEALTH HAZARD DATA

Steel products in the solid state do not present any known health hazards. However, some users' processes such as welding, burning, sawing, grinding, or cutting may produce fume or dusts. Health hazard data is given for fume or dusts.

**Effects of Overexposure**

**Acute** - Irritation of eyes, nose, throat and lungs. Contact dermatitis. Metal fume fever or flu-like symptoms.

**Chronic** - Bronchitis, pneumonitis, siderosis, inflammation of upper respiratory tract, headaches, lack of coordination, and acute metal fume fever.

**Major Exposure Hazard** - Inhalation.

#### Section IV - Health Hazard Data Continued

**Emergency and First Aid Procedures** - Applicable for Dusts and Mists.

**Inhalation** - If symptoms of pulmonary involvement develop (coughing, wheezing, etc.) remove from exposure and seek medical attention.

**Skin Contact** - If irritation or rash occurs, thoroughly wash affected area with soap and water and remove from exposure.

**Eye Contact** - If irritation occurs, flush with copious amounts of water.

#### SECTION V - FIRE AND EXPLOSION DATA

**Flash Point** - N/A

**Autoignition Temperature** - N/A

**Flammability Limits** - N/A

**Extinguishing Media** - N/A

**Special Fire Fighting Data** - N/A

**Explosion Hazard** - N/A

#### SECTION VI - REACTIVITY DATA

**Stability** - Stable

**Incompatibility** - N/A

**Decomposition Products** - Iron Oxide

**Hazardous Polymerization** - N/A

#### SECTION VII - SPILL OR LEAK PROCEDURES

**Spill or Leak** - N/A

**Disposal** - Follow solid waste disposal regulations of local, state, and Federal agencies

#### SECTION VIII - SPECIAL PROTECTION INFORMATION

**Respiratory Protection** - NIOSH-approved dust/mist/fume respirator if P.E.L. is exceeded.

**Ventilation** - Provide local ventilation to keep welding fume or dusts below P.E.L.

**Gloves** - As per American Welding Society recommendations.

**Protective Clothing** - As per American Welding Society recommendations.

**Eyes** - Safety glasses as per ANSI STD Z-86.1. Welding hood for welding, cutting, burning, or brazing.

**Other** - As per applicable standards for process.

#### SECTION IX - SPECIAL PRECAUTIONS

User should consult applicable standards for specific process employed to determine any special precautions needed to insure the health and safety of its employees.