

MATERIAL SAFETY DATA SHEET

CARBON STEEL

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

Plain Carbon or Low Alloy Steel: Grades A.S.T.M. 1005-10100, 1513-1572, (A36, A242, A529, A569, A572, A588, A615, A709, A992, F432s)

Emergency Telephone Number

813/286-8383

Telephone Number for Information

813/286-8383

Chemical Name

Iron and Various Alloys, Mild Steel (low Carbon)

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<u>Hazardous Components (Common Name)</u>	<u>CAS No.</u>	<u>OSHA PEL (mg/m³)</u>	<u>ACGIH TLV (mg/m³)</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	5.0	n/a	2.0
Phosphorous (yellow)	7723-14-0	0.1	0.1	n/a	0.06
Sulfur (as Sulfur Dioxide)	7446-09-5	5.0	2.0	n/a	0.08
Silicon	7740-21-3	(TWA) 5.0	(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	0.1	0.05	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 H₂O - 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.