



**MET081**

**LY SCHOOLS**

215 S.E. 6th Ave.  
HILLSBORO, OR 97123

**MATERIAL SAFETY DATA SHEET**

**CM 0077**

**Product Name: LOW CARBON (MILD STEEL) STEEL PRODUCTS, all grades**

**Manufacturing Facility, Company, or Subsidiary:** Several Facilities

**Address:** 1001 Grove Street, Middletown, Ohio 45044

**Phone (during normal business hours):** 513/425-2178

**Date of Preparation:** October 1, 1985 SSF Revised 7/1/89 WHL

**SECTION I — COMPONENT DATA:**

Chemical Components	C.A.S. Number	% Wt.
Primary Metals:		
Iron	7439-89-6	►98

**Coatings:**

A thin coating of petroleum-based oil or acrylic polymer (◀1% total weight of product) may be added to the surface as a corrosion inhibitor or preventative.

**SECTION II — PHYSICAL DATA:**

**Boiling Point (°F):** Not Applicable (N/A)

**Vapor Density (Air = 1):** N/A

**Specific Gravity H<sub>2</sub>O = 1):** Approx. 8

**Evaporative Rate (Ethyl Ether = 1):** N/A

**Vapor Pressure (mmHg @ 20° C):** N/A

**Solubility in Water:** N/A

**Percent Volatile By Volume:** N/A

**pH Information:** N/A

**Appearance and Odor:** Odorless solid with metallic lustre. Available as sheets, strip and pipe.

**SECTION III — FIRE & EXPLOSION HAZARD DATA:**

**Flash Point(°F):** N/A

**Flammability Limits (%/Vol):** LEL: N/A

**Auto-Ignition Temperature (°F):** N/A

**Special Fire-Fighting Instructions:** N/A

**Method Used:** N/A

**UEL:** N/A

**Extinguishing Media:** No fire or explosion hazards.

**Unusual Fire and Explosion Hazards:** N/A

**SECTION IV — REACTIVITY DATA:**

**Stability (conditions to avoid):** Stable

**Incompatibility (materials to avoid):** None

**Hazardous Decomposition Products:** Metal fumes and certain noxious gases, such as CO, may be produced during welding or burning operations. See Sections V and IX for further information.

**Hazardous Polymerization:** Will not occur.

**SECTION V — HEALTH HAZARD DATA:**

**Primary Route(s) of Entry:** Inhalation, skin contact.

**Effects of Exposure:** No toxic effects would be expected from its inert solid form. Prolonged, repeated overexposures to fumes or dusts generated during heating, cutting, brazing or welding may cause adverse health effects associated with the following constituents:

**Inhalation:**

**Iron:** Siderosis, no fibrosis.

**Oil Mist:** Pulmonary effects:

**Skin Contact:**

May cause irritation. Oil mist may cause dermatitis.

**Eye Contact:**

May cause irritation.

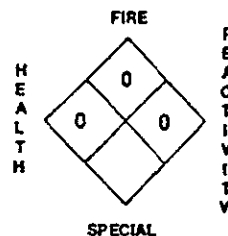
**Ingestion:**

May cause irritation of the mouth and throat.

**Medical Conditions Known to be Aggravated by Exposure to this Material:**

Persons with lung disorders or diseases or skin disorders may be at an added risk as a result of overexposure to this material.

**NFPA 704 RATING**



**Exposure Limits:**

Chemical Components	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )	NTP Listed	IARC Listed
Iron	10 (TWA as Fe <sub>2</sub> O <sub>3</sub> fume)	5-TWA (as Fe <sub>2</sub> O <sub>3</sub> fume)	No	No
Oil Mist, Mineral	5 (TWA)	5-TWA, 10-STEL	Yes <sup>1</sup>	Yes <sup>1</sup>

<sup>1</sup>Listed as "soots, tars, and mineral oils"

\*None on SARA 313 Toxic list

**SECTION VI — EMERGENCY & FIRST-AID PROCEDURES:**

**Inhalation:** Seek medical attention, if necessary.

**Skin:** If irritation develops, remove contaminated clothing immediately, and wash contaminated skin with soap or mild detergent and water for five minutes. If irritation persists, seek medical attention.

**Eyes:** In case of contact, immediately wash eyes with large amounts of water for fifteen minutes, occasionally lifting the lower and upper lids. Seek medical attention, if necessary.

**Ingestion:** Seek medical attention, if necessary.

**SECTION VII — SPECIAL HANDLING INFORMATION:**

**Ventilation:** Ventilation, as described in the *Industrial Ventilation Manual* produced by the American Conference of Governmental Industrial Hygienists, shall be provided in areas where exposures are above the permissible exposure limits or threshold limit values specified by OSHA or other local, state, and federal regulations.

**Respiratory Protection:** A properly fitted, NIOSH-approved, dust-fume respirator should be worn during welding or burning whenever welding fumes exceed the threshold limit value (TLV) or other recommended limits, in accordance with the OSHA Respiratory Protection Standard (29 CFR 1910.134).

**Protective Clothing:** Use appropriate protective clothing, such as welder's aprons and gloves, when welding or burning.

**Eye Protection:** Use face shield (8" minimum) and/or goggles when welding, burning, or grinding.

**SECTION VIII — SPILL, LEAK & DISPOSAL PROCEDURES:**

**Action to Take for Spills (use appropriate safety equipment):** N/A

**Waste Disposal Method:** N/A

**SECTION IX — SPECIAL PRECAUTIONS/ADDITIONAL INFORMATION:**

**Precautions to be Taken in Handling and Storage:** None

**DOT Information:**

**Hazardous Material Proper Shipping Name:** N/A

**Hazard Class:** N/A

**Identification Number:** N/A

**EPA Hazardous Waste Number:** N/A

**Additional Information:** During welding, precautions should be taken for airborne contaminants and noxious gases that may originate from the welding process or from components of the welding rod. Of special concern are silica or silicates, or both; fluorides; copper; manganese; carbon monoxide and nitrogen oxides. Arc and sparks generated when welding with this product could be a source of ignition for combustible and flammable materials.

While the information and recommendations set forth on this data sheet are believed to be accurate as of the present date, Contech makes no warranty with respect thereto and disclaims all liability from reliance thereon.