



Steel 0511V

Material Safety/Health Data Sheet

W 4134 8-91

DATE

November 15, 1984

LTV STEEL COMPANY'S NAME & ADDRESS
LTV Steel Company P.O. Box 6778 Cleveland, Ohio 44101NAME & TITLE OF INDIVIDUAL SUPPLYING INFORMATION
T.M. Clivic Manager Environmental HealthPRODUCT NAME/TRADE NAME
Hot/Cold Rolled Carbon Steel - Bar & WireCHEMICAL NAME & SYNONYMS
Example AISI Grade 1040AREA CODE & PHONE NO.
(216) 622-6242AREA CODE & LTV EMERGENCY PHONE NO.
(216) 622-5000

RECOMMENDED USE

NOTE: Ingredients and % wt. vary according to order specification

CAS#

% wt.

Permissible Exposure Limits

Units

Base Metal:
Iron

1309-37-1

97 - 99

PEL as Iron Oxide Fume

10 mg/M³

Alloys:

Manganese
Phosphorus
Sulfur
Vanadium7439-96-5
7723-14-0
7704-34-9
7440-6-22.25 - 1.65 PEL(c) as Manganese
.04 max. PEL as Phosphorus (Yellow)
.001 - .35 PEL as Sulfur Dioxide
.01 - .25 PEL(c) as Vanadium Pentoxide
- Fume
- Dust5 mg/M³
.1 mg/M³
13 mg/M³
.1 mg/M³
.5 mg/M³

II. GENERAL INGREDIENTS

III. PHYSICAL DATA

1. BOILING POINT--NA

2. VAPOR PRESSURE--NA

3. VAPOR DENSITY--NA

4. SOLUBILITY IN WATER--NA

5. SPECIFIC GRAVITY--7

6. % VOLATILE BY VOLUME--NA

7. EVAPORATION RATE--NA

8. AUTO IGNITION TEMP.--NA

9. APPEARANCE & ODOR
gray-black & odorless

10. PHYSICAL STATE--SOLID

pH--NA

Coatings:

Optional: Light surface coating of petroleum oil, phosphate or dry lube (borax or lime).

Note: Use gloves when handling to prevent skin irritation.

IV. EMERGENCY MEDICAL PROCED.

1. FIRST AID:

In case of excessive exposure, remove to fresh air, administer oxygen, and seek physician's assistance.

2. NOTES TO PHYSICIAN:

V. PERSON PROTECTION INFO.

SPECIFY TYPE & RISK

1. RESPIRATORY PROTECTION

2. PROTECTIVE CLOTHING

3. GLOVES

4. EYE PROTECTION

5. VENTILATION REQUIREMENTS

6. OTHER--AS PER WELDING REQUIREMENTS

NIOSH approved dust/mist/fume respirator is
DATA FILL IN HEREDepending on type, amount, location, rate and time of
exposure for appropriate protection

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NOTE

burning, welding, sawing, brazing, and grinding may result in action II.

Following effects if exposures exceed permissible limits

as

(4) HAZARD EXPOSURE HAZARD

☒ INHALATION ☐ SKIN CONTACT ☐ SKIN ABSORPTION ☐ EYE CONTACT ☐ INGESTION

Effects of Overexposure —

ACUTE:

Iron (Iron-oxide) - Irritation of eyes, nose, throat, metallic taste in mouth, or metal fume fever.
Manganese - Irritation of eyes, nose, throat, metallic taste in mouth, or metal fume fever.
Vanadium - Irritant to conjunctivae and respiratory tract (greenish-black discoloration of tongue and shortness of breath).

CHRONIC:

Iron (Iron-oxide) - Pulmonary effects, siderosis.
Manganese - Bronchitis, pneumonitis, lack of coordination.
Vanadium - No reported cases of exposure to vanadium.

VI. FIRE & EXPLOSION DATA

1. Flash Point—NA
2. Lower Explosive Limit—NA
3. Upper Explosive Limit—NA
4. Extinguishing Media—NA
5. Special Fire Fighting Precautions—NA

VIII. REACTIVITY DATA

Stable — Yes
Incompatibility — None
Products of Decomposition:
1. Metal fume: Iron oxide,
2. Vanadium Pentoxide,
3. Manganese
4.

I. SPECIAL PRECAUTIONS

1. Handling Storage—NA
2. Welding & Cutting—Adequate ventilation and/or approved respiratory protection should be provided if permissible exposure limits are exceeded.
3. Other Precautions—NA

II. SPILL & LEAK PROCEDURE

1. Clean up—NA
2. Waste Disposal—NA

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