

MANSORY WALL TIES

Material Safety Data Sheet

I. PRODUCT IDENTIFICATION

Chemical Name and Synonyms: Steel

Chemical Family: Metals

Formula: Not Applicable

II. PRODUCT DESCRIPTION AND HAZARDOUS INGREDIENTS/IDENTITY INFORMATION:

See Chart Inside for Listing

III. PHYSICAL DATA

Melting Point F (C): Greater than 2800 (1540)

Vapor Pressure: Not Applicable

Vapor Density (Air = 1): Not Applicable

Solubility in Water: Negligible

Appearance and Odor: Grayish to silvery odorless sheet, strip, plate, bar or structural shapes.

Specific Gravity (H₂O = 1): Greater Than 7

% Volatile by Volume (%): Not Applicable

Evaporation Rate: Not Applicable

IV. FIRE AND EXPLOSION HAZARD DATA

Flash Point F (C): Not Applicable Flammable Limits: Not Applicable

Extinguishing Media: Use methods Usual Fire & Explosion Hazards: None

Applicable to surrounding area.

Special Fire Fighting Procedures: Use self-contained breathing apparatus for protection against degradation products and fire fighting technique or agent (s) applicable to surrounding materials.

DISCLAIMER

DIETRICH INDUSTRIES, INC. MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MARKETABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The information contained in this Material Safety Data Sheet (MSDS) is believed to be correct, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications, hazards connected with the use of the material or the results to be obtained from the use thereof. User assumes all risk and liability of any use or handling of any material beyond Dietrich Industries' control. Variations in methods, conditions, equipment used to store, handle or process the material are solely the responsibility of the user and remain at its sole discretion.

When applicable, the product described in this MSDS is considered to be an "article" within the meaning of Title 29 of the Code of Federal Regulations, Section 1910.1200 of reg. This MSDS is intended to be used solely for the purpose of satisfying informational requests made pursuant to the requirement. It is not intended to preempt, replace or expand the terms contained in Dietrich's Conditions of Sale. Compliance with all applicable federal, state and local laws and regulations remains the responsibility of the user, and the user has the responsibility to provide a safe workplace, to examine all as-

pects of its operation, and to determine if or where precautions, in addition to those described herein, are required.

V. HEALTH HAZARD DATA

Applicable Statutory or Recommended Occupational Exposure Limits: No Threshold Limit Value (TLV) or Permissible Exposure Limit (PEL) exists for steel. See chart inside for listing of the individual constituents. Effects of Overexposure:

Acute – Dust or fume may cause irritation to the eyes, nose, or throat, leave a metallic taste in the mouth; result in metal fume fever, or produce flu-like symptoms.

Chronic – Aluminum: May initiate fibrotic changes to lung tissue

Bismuth: No chronic debilitating symptoms indicated from metal

Boron: No chronic debilitating symptoms indicated

Chromium: Skin ulceration, irritative dermatitis, allergic reaction, ulceration of the mucous membranes, perforation of the nasal septum, bronchial carcinoma, adenocarcinoma, mutagen(?)

Listed NTP and IARC Monographs.

Copper: No chronic debilitating symptoms indicated

Iron: Siderosis

Lead: Anemia, urinary dysfunctions, metallic taste in mouth, weakness, constipation, nausea, nervous disorder

Manganese: Bronchitis, pneumonia, lack of coordination

Molybdenum: Morphological changes in the liver, kidneys, and spleen, anemia, diarrhea, bone deformity and growth retardation

Nickel: Inflammation of respiratory tract, pneumoconiosis. Skin sensitizer, Certain nickel compounds can cause cancer. Listed NTP and IARC Monographs

Phosphorous: Necrosis of the mandible Sulfur (as sulfur dioxide): Edema of the lungs Tellurium: Garlic odor of breath and perspiration, metallic taste in mouth, dryness of the mouth, inhibition of sweat function, anoxia, nausea

Titanium: No chronic debilitating symptoms indicated

Vanadium: Emphysema, pneumonia

Zinc: Chromosomal anomalies in leukocytes reported. Arthritis, lameness and inflammation of the gastrointestinal tract reported from animal studies.

Emergency and First Aid Procedures:

In the event of acute exposure, remove to fresh air, administer oxygen and seek a physician's assistance.

VI. REACTIVITY DATA

Stability: Consider Stable

Incompatibility: Not incompatible with materials

Hazardous Polymerization: Not applicable

Hazardous Decomposition Products: Not Applicable

Conditions to Avoid: May liberate metal fumes, metal oxides or other oxides if exposed to elevated temperatures.

VII. SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Not Applicable

Waste Disposal Method: This material may be reclaimed for reuse.

VIII. SPECIAL PROTECTION INFORMATION

If operations are such that atmospheric level of contaminants exceed prescribed limits, provide local exhaust ventilation and/or adequate respiratory protection. Consult your regional codes or code of Federal Regulations, Title 29, Part 1910.252, Welding Cutting and Brazing 1910.134 Respiratory Protection, and 1920 subpart z, Toxic and Hazardous substances.

IX. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing: Not Applicable

Other Precautions: Not Applicable

Issued by: Dietrich Industries, Inc. Prepared by: R. A. Nelson Date prepared: 6-16-86

Personnel Department Personnel Mgr.