

HARD-N-TUFF
MATERIAL SAFETY DATA SHEET

02/05/00

MSDS PROVIDED BY:

STOODY INDUSTRIAL AND WELDING SUPPLY, INC.

3316 National Ave., San Diego, CA 92113

Phone: (619) 234-6750

MILITARY EMERGENCY RESPONSE NUMBER 1 (800) 851-8061

SECTION 1 – PRODUCT IDENTIFICATION

Product name: HARD-N-TUFF
Product use: n/av
Chemical family: Inorganic compounds

Supplier name and address:

AMERICAN CHEMICAL & FLUX PRODUCTS
5722 Union Pacific Ave
Los Angeles, Ca 90022

(323) 723-0713

WHMIS CLASSIFICATION: D2B

HMIS rating : Health 2*, Flammability : 1, Reactivity : 0

Manufacturer name and address

James Morton, Inc.
50 Franklin,
Batavia, NY
14020

Emergency Tel. #: CANUTEC (613) 996-6666

SECTION II – HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>Wt. %</u>	<u>LC₅₀ ppm (Rat, ihl.)</u>	<u>LD₅₀ mg/kg (Rat, oral)</u>
Chromium Oxide	1308-38-9	15	n/av	n/av
Ammonium Chloride	12125-02-9	6.3	n/av	n/av
Sodium borate	10043-35-3	6.3	n/av	n/av
Manganese Dioxide	1313-13-9	5-10	n/av	n/av
Calcined Petroleum Coke	64743-05-1	5-10	n/av	n/av
Flour				
Soda Ash	497-19-8	5-10	n/av	n/av
Titanium Dioxide	13463-67-7	5-10	n/av	n/av
Silica, amorphous, fumed	7631-86-9	5-10	n/av	n/av

SECTION III – PHYSICAL DATA

Physical State:

Odor and Appearance: Green powder, slight ammonia odor

Odor threshold: 0.7ppm (perception) for ammonia

Specific Gravity 0.71

Coefficient of water/oil distribution: n/av

Vapor pressure (mm Hg): n/av

Boiling Point n/ap

Freezing point (melting point): 520°C

PH: n/av

Vapor Density (Air=1) n/av

Evaporation Rate (BuAe=1): n/av

Volatiles, %: n/av

Solubility in Water: 48%

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SECTION IV-FIRE AND EXPLOSION HAZARD DATA

Conditions of flammability: Not flammable; unless very dense dust cloud formation (as applicable to all kinds of dense dust cloud)

Means of extinction: n/av

Sensitivity to mechanical impact/static discharge: n/av

Flash point (Method): n/ap

Upper flammable limit %: n/av

Lower flammable limit %: n/av

Auto-ignition temperature: n/av

SECTION V-REACTIVITY DATA

Stability: Stable Hazardous polymerization will not occur.

Incompatible materials: Strong oxidizing agents, and metals e.g. Lithium.

Conditions of reactivity: Stable under ambient temperature and pressure. Do not mix with other materials. Use only as directed.

Hazardous decomposition products: Thermal decomposition yields oxides of nitrogen, oxides of carbon, ammonia, chloride, oxide of sodium.

SECTION VI- TOXICOLOGICAL PROPERTIES

*** Routes of exposure and acute/chronic effects***

Exposure limit: 0.5mg/m3 for chromium oxide (ACGIH-TLV)

Inhalation: Irritation of respiratory tract. Fumes are toxic.

Skin: May cause irritation. Trivalent chromium compounds have been reported to cause allergic dermatitis.

Eyes: Irritation.

Ingestion: Irritation of gastrointestinal tract.

Chronic effects: Possible hematologic effects and kidney damage.

Carcinogenicity: None listed (ACGIH-TLV, IARC)

Reproductive effects, Teratogenicity, Mutagenicity: n/av

SECTION VII- FIRST AID

Inhalation: Remove to fresh air. If breathing stopped, begin artificial respiration. Call physician

Skin: Flush with water for at least 15 minutes, call physician if irritation persists.

Eyes: Flush with water for at least 15 minutes, call physician.

Ingestion: Do not induce vomiting. Obtain medical attention immediately.
