CODE: 822-460 HARSHAW/FILTROL PRODUCT NAME Ming Orange Dark Softex MATERIAL SAFETY DATA SHEET Color NO. 2522-03 SECTION I -- IDENTIFICATION — H-33-84-WP DATE: 12/05/85 SUPPLIER'S NAME Harshaw/Filtrol Partnership EMERGENCY TELEPHONE 216/292-9200 30100 Chagrin Blvd. CHEMICAL NAME Co-precipitate of ADDRESS Cleveland, Ohio 44124 lead molybdate, lead chromate and lead sulfate: C.I. Pigment Red 104 CAS No. 12656-85-8 FORMULA C.I. 77605 U.N. No. Not applicable D.O.T. CLASSIFICATION Not regulated SECTION II -- HAZARDOUS INGREDIENTS OF MIXTURES = % Material or Component Threshold Limit Value 0.050mg/m3 as Pb(OSHA 8-hr TWA) 56.7(typical) Lead 19.6(typical) 0.100mg/m3 as CrO3 (OSHA 8-hr TWA) Chromate (as CrO₃) SECTION III -- PHYSICAL DATA == Not applicable MELTING POINT Not applicable BOILING POINT SPECIFIC GRAVITY (H₂0=1) 5.36 (typical) VAPOR PRESSURE Not applicable

% VOLATILES BY VOLUME Not applicable EVAPORATION RATE (Butyl Acetate=1)
Not applicable

APPEARANCE AND ODOR Fine soft orange powder; odorless

VAPOR DENSITY (Air=1) Not applicable

Although hexavalent chromium compounds are considered to be oxidizing, due to the insolubility of lead chromates very little oxidizing hazard is expected. Lead chromates in the presence of organic compounds at elevated temperatures may create a fire hazard.

SECTION IV -- FIRE AND EXPLOSION DATA =

SOLUBILITY IN H2O (% by Wt.) Insoluble

SECTION V -- HEALTH HAZARD DATA =

THRESHOLD LIMIT VALUE See Section II above

EFFECTS OF OVEREXPOSURE

Eye contact may cause irritation.

Skin contact may cause irritation and also allgeric reaction.

Inhalation may cause respiratory irritation and also allergic reaction.

Chronic:

- A. Prolonged or repeated inhalation and ingestion, such as from poor hygiene, housekeeping or handling practices, can result in lead poisoning. Early symptoms are fatigue, disturbance of sleep, and constipation, with more severe exposure followed by colic, anemia and neuritis (nerve inflamation). Prolonged over-exposure can severely damage red blood cell formation, kidneys and nervous system. Other symptoms include loss of appetite, metallic taste in mouth, anxiety, nausea, pallor, headache, irritability, muscle and joint pain, tremors; numbness, dizziness, and hypertension.
- B. The OSHA lead standard reports that lead may impair the reproductive systems of both men and women; damage may also be caused to unborn fetuses. Lead chromate is suspected to cause lung cancer and is listed by the National Toxicology Program 1983 Annual Report on Carcinogens and the ACGIH, 1983-84 list of Industrial Substances Suspect of Carcinogenic Potential for Man.

EMERGENCY AND FIRST AID PROCEDURES

Eye and Skin contact: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Flush skin with water.
Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Call

a physician.

Ingestion: Call a physician

If any other harmful effects are suspected, a physician should be called promptly to determine the necessity for treatment or other testing.

___ DATE: 12/05/85 ____ SECTION VI -- REACTIVITY DATA ____ CODE: 822-460 ___

CONDITIONS CONTRIBUTING TO INSTABILITY None expected

INCOMPATIBILITY See Section IV, Fire and Explosion Data

HAZARDOUS DECOMPOSITION PRODUCTS None expected

SECTION VII -- SPILL OR LEAK PROCEDURES =

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Immediately scoop up or vacuum spillage. Avoid dusting. Depending on the quantity spilled, notification of the National Response Center (800/424-8802) may be required in the case of hazardous substances. (See EPA, DOT and various state and local regulations.)

We recommend that the purchaser establish a spill prevention, control and countermeasure plan. This plan should include procedures for proper storage as well as clean-up of spills and leaks. The procedures should conform to safe practices and provide for proper recovery or disposal.

WASTE DISPOSAL METHOD Dispose of in accordance with Federal, state and local laws. Lead chromate pigments if disposed of by themselves are a hazardous waste on the basis of EP Toxicity under EPA hazardous waste regulations. Waste mixtures containing this product should be tested for EP toxicity.

SECTION VIII -- PROTECTIVE EQUIPMENT =

VENTILATION Local exhaust ventilation is recommended to control exposures to within OSHA limitations for both lead and chromates. The ventilation systems must be evaluated quarterly.

PERSONAL PROTECTIVE EQUIPMENT

Chemical goggles. Gloves

Body protection as necessary to prevent skin conta A NIOSH/MSHA approved respirator as necessary

SECTION IX -- SPECIAL PRECAUTIONS =

Avoid breathing dust.

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Keep container closed.

Keep away from food and feed products.

NOTE: Consult the most recent OSHA Lead Standard (1910.1025) and its attachments,

appendices, etc., for full requirements, some of which are not covered in this Material

Safety Data Sheet.

SECTION X -- PERSONNEL SAMPLING PROCEDURE

Air Sampling for Lead: Refer to NIOSH Manual of Analytical Methods, 3rd Edition, Volumw 2, Method 7082. (If there are no exposures to other chromium compounds, total chromium as hexavalent chromium can be determined on the same samples.) Air Sampling for Hexavalent Chromium: Refer to NIOSH Manual of Analytical Methods, 3rd Edition, Volume 1, Method 7600.

Biological Monitoring for Lead: Blood lead testing may be required. Consult OSHA Lead Standard 1910.1025 and your local physician for specific requirements.

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12/05/85 DATE: 822-460 CODE:

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