

MATERIAL SAFETY DATA SHEET

CHROMIUM DUST

DIVISION ADDRESS

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15591

BB

ISSUE DATE 8/15/88

EMERGENCY NO.:

(301) 776-1100

Produce Code Number - J5310-J5351

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I. PRODUCT IDENTIFICATION

PRODUCT NAME
CHEMICAL FAMILY
CHEMICAL NAME
CAS NUMBER
T.S.C.A. STATUS
OSHA HAZARD COMMUNICATION STATUS
CHEMICAL FORMULA

Chrome Oxide Green
Chrome (III) Oxide
C.I. Pigment Green 17, C.I. 77288, DCMA #3-05-3
1308-38-9
Listed on the TSCA Inventory
This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
Cr2O3

II. INGREDIENTS

COMPONENTS: C.I. Pigment Green 17 (CAS# 1308-38-9)
%: Essentially 100
OSHA-PEL 0.5 mg/m3
ACGIH-TLV 0.5 mg/m3 (as Chromium)

III. PHYSICAL DATA

APPEARANCE Powder
COLOR Green
ODOR Odorless
MELT POINT/FREEZE POINT Greater than 1000°C
pH 5.5 to 7.5 at 50 g/l water at 20°C DIN 53200
SPECIFIC GRAVITY 5.2 g/cm at 20°C
BULK DENSITY Approx: 800 kg/m3 at 20°C
SOLUBILITY IN WATER Insoluble
% VOLATILE BY VOLUME Not Applicable

IV. FIRE & EXPLOSION DATA

FLASH POINT *F (*C) Not Applicable
DECOMPOSITION TEMPERATURE Not Applicable
IGNITION TEMPERATURE Not Applicable
FLAMMABLE LIMITS -
Lel Not Applicable
Uel Not Applicable
EXTINGUISHING MEDIA Water, dry chemical, CO2, foam
SPECIAL FIRE FIGHTING PROCEDURES/UNUSUAL FIRE OR EXPLOSION HAZARDS:
Firefighter should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Avoid dusting. Dust can form explosive mixtures with air.

V. HUMAN HEALTH DATA

PRIMARY ROUTE(S) OF EXPOSURE Eye and skin contact, inhalation of dusts.
HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE
ACUTE On the basis of animal toxicity testing (see Section XII), we expect this product to be moderately irritating to the eyes, primarily caused by mechanical action of the dust in the eyes. Symptoms may include redness, swelling or tearing of the eyes. We also expect this product to be non-irritating to the skin and essentially non-toxic by ingestion.
CHRONIC No applicable information was found concerning any adverse chronic health effects from overexposure to this product.
MEDICAL CONDITIONS
AGGRAVATED BY EXPOSURE Persons with preexisting eye conditions or impaired pulmonary function may be more susceptible to the effects of this product.
CARCINOGENICITY This product is not listed by NTP, IARC or regulated as a carcinogen by OSHA.
OTHER NTP, IARC and ACGIH found that "there is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals". The chromium compounds that are considered carcinogenic are hexavalent chromium compounds. This product is a trivalent chromium compound. It is not specifically listed as a carcinogen by NTP, IARC or ACGIH. This product contains an average of less than 5 ppm of leachable hexavalent chromium (0.0005%), with typical values of 1 to 3 ppm (0.0001% to 0.0003%), as leachability in water.

VI. EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
SKIN CONTACT In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation persists.
INHALATION If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
INGESTION If swallowed, call a physician.

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EMPLOYEE PROTECTION RECOMMENDATIONS

EYE PROTECTION Chemical safety goggles.
SKIN PROTECTION Rubber gloves and chemically resistant clothing to minimize skin contact. Employees should wash their hands and face before eating, drinking or using tobacco products.
RESPIRATORY PROTECTION Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved organic/acid respirator with a dust prefilter should be worn.
VENTILATION Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.
OTHER Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals.

VIII. REACTIVITY DATA

STABILITY Stable
POLYMERIZATION Will not occur.
INCOMPATIBILITY (MATERIALS TO AVOID) None Known
HAZARDOUS DECOMPOSITION PRODUCTS None Known

IX. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Utilize recommended protective clothing and equipment. Spills should be swept up and placed in containers. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water.
CERCLA (SUPERFUND) REPORTABLE QUANTITY: None
WASTE DISPOSAL METHOD: Waste disposal should be in accordance with existing federal, state and local environmental regulations.
RCRA STATUS This product when discarded as sold would not be considered a RCRA hazardous waste (average leachable hexavalent chromium content is below 5 ppm).

X. SPECIAL PRECAUTIONS & STORAGE DATA

STORAGE TEMPERATURE (MIN./MAX.) Minimum: Ambient
 Maximum: 122°F (50°C)
AVERAGE SHELF LIFE 12 months in closed container.
SPECIAL SENSITIVITY (HEAT, LIGHT, MOISTURE) Avoid contact with moisture.*
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Avoid breathing dust. Avoid getting in eyes. Wash thoroughly after handling. Store in a dry place away from excessive heat, in original or similar waterproof containers. Reseal containers immediately after use. Store away from food and beverages

XI. ANIMAL TOXICITY DATA

ACUTE -
ORAL, LD50 Greater than 10,000 mg/kg - Rat
DERMAL, LD50 Data not established for product.
INHALATION, LC50 Data not established for product.
EYE EFFECTS Moderately irritating by mechanical action.
SKIN EFFECTS Non-irritating to rabbit skin.
SENSITIZATION Data not established for product.
CHRONIC Data not established for product.
SUB-CHRONIC Data not established for product.
OTHER (Mutagenic, Teratogenic, Reproductive Tests): Data not established for product.
AQUATIC TOXICITY Fish LC₅₀ - 1000 mg/l - Golden orfe (Leuciscus idus)

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*Tests at the Institute for Toxicology of Bayer AG.

HMS - H 0 F 0 R 0