



MATERIAL SAFETY DATA

MSDS Number: **HHCP-CO-3 * * * *** Effective Date: **01/13/2006**

Dichromium Trioxide

Section I:

Manufacturer's Name: Refractory Depot, Inc.

Address: P.O. Box 26188
Collegeville, Pennsylvania 19426

Emergency Telephone Number: 610-308-5449

Telephone Number for Information: 610-308-5449

Date Prepared: January 13, 2006

Signature of Preparer: *Robert H Stevenson*

Section II: Product Identification

Synonyms: Chromium (III) Oxide; Chromic Oxide; Chrome Oxide Green

CAS No.: 1308-38-9

Einecs No.: 215-160-9

Molecular Weight: 151.99

Chemical Formula: Cr₂O₃

Color Index: pigment green 17 (77288)

Delivery form: powder

Section III. Physical Characteristics

Water –soluble content : 0.3%max

Sieve residue (0.045mm sieve) : 0.05%max

PH Value: 5-7

LOI on 1000C x 1/4 hrs: 0.5%max

Bulk density: 1-1.3g/cc

Odour: odourless

Melting point: >1000C

Density: approx 5.2g/cc at 20C

Section IV: Chemical Analysis:

Cr₂O₃: 98.5%min
Fe₂O₃: 0.03%max
SiO₂: 0.02%max
SO₄: 0.4%max
P: 0.005%max
Cu: 0.001%max
Mn: 0.001%max
Co: 0.001%max

Section V. Hazards identification:

Hazard warning not required. The product is not classified as dangerous under the relevant EC directives and corresponding national regulations valid in the individual EU member states. It is not dangerous according to transport regulations.

Section VI. First aid measures:

Upon inhalation of aerosol vapor dust, take the patient into fresh air. If there is difficulty breathing, medical advice is required.

Skin contact: Clean with plenty of water, soap or other non-irritating cleansing agents.

Eye contact: Contamination of the eyes must be treated by thorough irrigation with water, with the eyelids held open. A doctor should be consulted.

Upon swallowing: Make the patient drink water, wash out mouth repeatedly. Seek medical advice.

Section VII. Fire fighting measures:

Extinguishing media: CO₂, foam, dry powder

In case of larger fires, water spray should be used.

Firemen have to wear self-contained breathing apparatus.

Section VIII. Accidental release measures

Take up mechanically; avoid dust formation.

Section IX. Handling and Storage

Keep container dry and tightly closed in a cool, well ventilated place. Ensure adequate ventilation or exhaust ventilation in the working area. Take measures to prevent dust formation, remove any dust with air extractor where it is formed. VCI storage class: 13

Section X. Exposure control/personal protection:

Wear suitable protective clothing, protective goggles and, if necessary, dust mask during work, chemical resistant protective gloves according to DIN/EN 374 are recommended. Do not breathe dust. Avoid contact with eyes and skin. Keep away from food and drink items. Wash hands before breaks and at end of work.

Section XI. Stability and reactivity:

Hazardous decomposition products: No hazardous decomposition products observed.
Hazardous reaction: No hazardous reactions observed.

Section XII. Toxicological information

Acute toxicity: LD50 oral, rat: more than 10000mg/kg
Skin and mucous membrane compatibility, rabbit:
Skin 24 hours exposure – non-irritant
Eyes – moderately irritant by mechanical action.
Mutagenicity: micronucleus test: negatives (mouse)

Section XIII. Ecological information

Acute fish toxicity: LC0>10 000mg/L
Test Species: Brachydanio rerio
Duration of test: 96h
Acute bacterial toxicity:
No harmful effect on Escherichia coli: 1000 mg/L
No harmful effect on Pseudomonas fluorescens: 1000mg/L
As the product is practically insoluble in water, it is separated in almost any filtration and sedimentation process.
Water pollution class: Not hazardous to water
WGK: Classification in accordance with the German Water Resources Act

Section XIV. Disposal considerations:

The relevant EU directives and local regional and national regulations must be complied with. Examine possibilities for re-utilization. Maybe disposed of in approved landfills provided local regulations are observed. For disposal within the EC, the appropriate code according to the European waste Catalogue (EWC) should be used. I

Section XV. Transport information

Not dangerous cargo. Keep dry and separated from food items.

Section XVI. Regulatory information

No labeling is required in accordance with the EEC directives.

Section XVII. Other information:

The date given here is based on current knowledge and experience, the purpose of the safety data sheet is to describe the products in terms of their safety requirements, the data does not signify any warranty with regard to the products properties.

Prepared by:

Technical Division
Refractory Depot, Inc.
610-308-5449