

CTM POTTERS SUPPLIES

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information:

Product Name : Chrome Oxide Green
Chemical Name : Chromium (III) Oxide
Synonyms : Dichromium trioxide, Chromix oxide
Chemical Formula : Cr₂O₃
Molecular Weight : 152
CAS Number : 1308-38-9
EINECS Number : 215-160-9

Company : CTM Potters Supplies
Unit 10A, Millpark Industrial Estate
White Cross Road
Woodbury Salterton
Nr. Exeter
EX5 1EL

Telephone : 01395-233-077
Fax : 01395-233-905

Use of the Substance/Preparation : Ceramics, Construction, Paints, Plastics

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Formula	Wt. Percent	CAS Number	EC Number
Chromium (III) Oxide	Cr ₂ O ₃	99.5%	1308-38-9	215-160-9

3. HAZARD IDENTIFICATION

Emergency overview:

Not regarded as a health or environmental hazard under current legislation.

Potential Effects of Exposure:

Inhalation: Repeated and prolonged exposure to trivalent chromium compounds may cause delayed effects involving the respiratory system.

Eyes: May cause eye irritation.

Ingestion: No specific health warnings noted.

Skin contact: Powder may irritate skin.

4. FIRST AID MEASURES

General Recommendations:**Inhalation:**

Remove the subject from source of exposure.
Consult a physician in case of respiratory symptoms.

Eyes:

Flush eyes with running water for several minutes, while keeping the eyelids wide open.
Consult an ophthalmologist in case of persistent pain.

Skin:

Wash the affected skin with soap and water.

Ingestion:

Contact a physician for advice.
If the subject is completely conscious rinse mouth with water.
Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flash Point:

Not Applicable

Auto Ignition Temperature:

Not Applicable

Flammability Limits:

Not Applicable

Unusual Fire/Explosion Hazards:

None

Extinguishing Methods:

Common: In case of fire in close proximity, all means of extinguishing are acceptable.
Inappropriate extinguishing means: No restriction.

Fire Fighting Procedures:

Specific Hazards:

None.

Protective measures in case of intervention:

Intervention only by capable personnel who are trained and aware of the hazards of the product.
Wear self-contained breathing apparatus when in close proximity or in confined spaces.

Other precautions:

If safe to do so remove the exposed containers.
As for any fire, ventilate and clean the rooms before re-entry.

6. ACCIDENTAL RELEASE MEASURES

Precautions:

Keep away materials and products, which are incompatible with the product (see section 10).
Avoid dispersing the dust into a cloud.

Clean up methods:

Collect the product with suitable means, avoiding dust formation.
Place everything into a closed, labelled container compatible with the products.
For disposal methods, refer to section 13.
Clean the area with large quantities of water.

Precautions for protection of the environment:

Immediately notify the appropriate authorities in case of significant discharge.
Prevent discharges into the environment (sewers, rivers, soils etc.).

7. HANDLING AND STORAGE

Handling:

Operate in a well-ventilated area.
Keep away from reactive products (see section 10).

Storage:

Store in ventilated, cool area.
Keep away from reactive products (see section 10).
Keep in original packaging, closed.

Specific Uses:

Suited for use in ceramics, construction, paints, and plastics.

Other precautions:

Avoid dust and formation of dust clouds.
Warn people about the dangers of the product.
Follow the protective measures given in section 8.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Limit Values:**

0.5 mg.m³ 8hr TWA as Cr.

Exposure Controls:

Follow the protective measures given in section 7.
Maintain employee exposures to levels below the applicable exposure limits.

Occupational Exposure Controls:**Ventilation:**

Provide local ventilation suitable for the dust risk.

Respiratory protection:

In case of emissions and dust cloud/fog/fumes, face mask with appropriate cartridge. Use only respiratory protection that conforms to international/national standards.

Hand protection:

Protective gloves – chemical-resistant (PVC, neoprene and rubber).

Eye protection:

Dustproof goggles, if dusty.

Skin protection:

Overalls.

Other precautions:

Do not smoke, eat or drink in the working area.
Consult the industrial hygienist or safety manager for the selection of personal protective equipment suitable for the working conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance:**

Form	fine powder
Colour	green
Odour	odourless

Important Health, Safety and Environmental Information:

pH:	7.5 at 0.5% concentration	
Change of state:	Melting point	2,266 ⁰ C
	Boiling point	4,000 ⁰ C
	Decomposition Temperature	not applicable
Flash point:	not applicable	
Flammability:	not applicable	
Explosive properties:	not applicable	
Oxidising properties:	not applicable	
Relative density:	5.1g/cm ³ at 20 ⁰ C	
Water solubility:	Insoluble in water	
Vapour density:	not applicable	

Vapour pressure: not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions. Above 60 ⁰ C oxidises to Fe ₂ O ₃ .
Conditions to avoid:	Dry chromium (III) oxide powder can react with molten alkali at very high temperatures under oxidising conditions.
Materials and substances to avoid:	May react with chlorine trifluoride, lithium, nitroalkalines, dirubidiumacetylide, oxygen difluoride and other strong oxidisers.
Hazardous decomposition products:	A small amount (<0.1% as Cr) of reversion to hexavalent chromium may occur if the dry chromium (III) oxide powder is exposed to elevated temperatures.
Hazardous polymerisation:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Oral rat LD ₅₀ = >5,000mg/kg of body weight.
Chronic Toxicity:	No specific health warnings noted.
Carcinogeny/Mutagenecity:	IARC Class 3 carcinogens.

12. ECOLOGICAL INFORMATION

Acute ecotoxicity:	Avoid washing into water courses. Avoid contaminating public drains or water supply.
Aquatic toxicity (fish):	Zebra barb LC ₀ (96hrs) - >10,000mg/l
Bacterial toxicity:	Harmless against Escherichia coli at 1,000mg/l Harmless against Pseudomonas fluorescens at >10,000mg/l

13. DISPOSAL CONSIDERATIONS

Disposal guidance:

Recover and reclaim or recycle, if practical. Contact specialist disposal companies. Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

Land transport ADR/RID:	Not classified.
Marine transport:	Not classified.
Air transport:	Not classified.

15. REGULATORY INFORMATION

Labelling:	Not classified.
Risk Phrases:	Not classified.
Safety Phrases:	Not classified.

16. OTHER INFORMATION

Further information:

Data sheet producing department: CTM Potters Supplies
Telephone: 01395-233-077

Disclaimer:

The information contained in this safety data sheet has been prepared using the best available information, however in view of technical developments, this may alter. The material must only be used for its stated purpose and the information contained within this data sheet is offered solely for use in the evaluation of this product in respect of safety, health and environmental hazards. Due to the many factors outside our control when using this product, we cannot accept liability for any injury, accident, loss or damage caused through its use.