

## MATERIAL SAFETY DATASHEET

### CHROME OXIDE

Emission date:01.10.2018

#### 1. Identification of substance and supplier.

Product name: Chrome Oxide Green  
Chemical name : Chromium (III) Oxide  
Supplier: WUXI LIANGHAI IMP AND EXP CO.,LTD  
No88 HUIZHAN ROAD,JIANGSU P.R.CHINA

#### 2. Chemical composition.

Chemical Formula: Cr<sub>2</sub>O<sub>3</sub>  
Synonyms: chromium Oxide Green  
Composition: greater than 98% Cr<sub>2</sub>O<sub>3</sub>  
C.A.S. No.: 1308-38-9  
EINECS No.: 215-160-9

#### 3. Hazards Identification

This product is not listed as a dangerous substance in appendix 1 of the 25th amendment 98/98/CE of directive 67/548/CE.No specific hazards are encountered in normal use.No labelling is required in accordance with EEC Directives. When handling , observe general precautions for chemical substances and avoid theformation of dust.

#### 4. First aid measures

Inhalation: Possibility of respiratory and throat irritation. Remove person to fresh air and gargle well. If symptoms persist, seek medical attention. Skin contact: Irrigate thoroughly with cold water. Remove contaminated clothing. If symptoms persist seek medical attention. Eye contact: Flush eyes with plenty of water thoroughly holding eyelids apart to ensure flushing of entire eye surface. If symptoms persist seek medical attention. Ingestion: Drink plenty of water. Attempt to make subject vomit. Seek medical attention.

#### 5. fire - Fighting Measures.

Chrome oxide pigments are non-combustible and there is no evidence of fire risk. In case surrounding fire, water, dry chemical, carbon dioxide and other extinguisher can be used.

#### 6. Accidental Release Measures.

If necessary, wear a dust mask..  
Do not allow the product to enter drains or waterways.  
Collect spilled product in a suitable labelled container avoiding fornation of dust.

#### 7. Handling and Storage.

-Handling:

When handling this product, avoid exposure and minimise inhalation, ingestion, eye or skin contact. It is advisable to provide the work area with adequate local exhaust ventilation where dust may be generated. It is advisable to use personal protective equipment. Wash hands thoroughly after handling. If possible, take a shower at the end of work shift.

-Storage: It is recommended that the material is stored in closed containers in a place protected from rain and bad weather conditions.

8. Exposure Controls And Personal Protection.

a). Applicable exposure levels are:

TLV-TWA: 0.5mg/m<sup>3</sup> as Cr (ACGIH)

b). Personal Protective Equipment:

-Respiratory protection: use dust mask if ventilation is inadequate.

-Skin: use normal workwear resistant to dust, closed at wrist and ankles, and fastened shoes.

-Eyes : use goggles.

-Hands: wear rubber or PVC gloves.

The product can be oxidised in a small part to hexavalent chrome if used at high temperatures in oxygen

containing atmospheres. Hexavalent chrome is identified as harmful to health.

Ensure that worker exposure is below the relevant limits. Exposure limits applicable for hexavalent chrome:

ACGIH TLV:	0.01mg/m <sup>3</sup> as insoluble Cr (VI)
	0.05mg/m <sup>3</sup> as soluble Cr (VI)
OSHA PEL:	0.1mg/m <sup>3</sup> as Cr <sub>2</sub> O <sub>3</sub> TWA
NIOSH REL:	0.025mg/m <sup>3</sup> TWA

9. Physical and Chemical Properties:

Formula: Cr<sub>2</sub>O<sub>3</sub>

Molecular weight: 152

Appearance: fine powder.

Colour: green.

Odour: no distinctive odour

PH(5% aqueous solution, room temperature): 5—7

Melting point: above 2400°C

Boiling point: 4000°C

Ignition point: n.a.

Autoignition: none

Flammability: non-flammable

Explosive limits: n.a.

Vapour pressure: n.a.

Density: 5.21g/cm<sup>3</sup>

Bulk density: 0.8-1.1g/cm<sup>3</sup>

Solubility: insoluble in water and inorganic solvents, very slightly soluble in acidic solutions.

#### 10. Stability and reactivity

-Stability: This product is stable.

-Conditions to avoid: Avoid conditions that encourage dust formation.

-Hazardous decomposition products: This product may be oxidised in small amounts to hexavalent chromium when it is used at elevated temperatures in an oxygen-containing atmosphere.

#### 11. Toxicology information

Acute toxicity: LD50/oral/rat: > 5000mg/kg

Skin contact: Contact with healthy skin does not cause irritation. In susceptible people sensitisation is possible.

Eye contact: Exposure will cause moderate irritation due to mechanical action and might cause conjunctivitis.

Inhalation: Can provoke irritation of respiratory tract.

Chrome (III)Oxide is not considered cancerogenic (IARC 1990; IPCS1988).

#### 12. Ecological information

Product is inert and insoluble.

For discharges to water and atmosphere refer to national and local regulations.

#### 13. Disposal considerations

Product and packaging should be disposed of as indicated in national and local regulations.

#### 14. Transport

There are no specific transportation precautions required.(Product is not subject to ADR.)

#### 15. Regulatory information

This product is not listed as a dangerous substance in appendix 1 of the 25th amendment 98/98/CE of directive 67/548/CE. No special labelling is required. This material safety data sheet has been compiled according to directive 91/155/CE.

#### 16. Other information

The data presented herein is based on current knowledge.

Users of the product must conform to applicable laws and regulations and should satisfy themselves as to the completeness of the information presented for their specific requirements. This version substitutes all previous versions.