

GHS Safety Data Sheet

SDS No. : CRO02PAEG

Date Issued:2014/08/07

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: CrO₃ Chromium(VI) oxide

Product number	Purity	Form	Size (mm)
CRO04PB	99.99%(4N)	powder	—

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284
 Phone: +81-49-284-1511 Fax: +81-49-284-1351
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Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Skin corrosion / irritation : Category 1A Serious eye damage / eye irritation : Category 1 Sensitisation, respiratory : Category 1 Sensitisation, skin : Category 1 Germ cell mutagenicity : Category 2 Carcinogenicity : Category 1A Specific target organ toxicity, repeated exposure : Category 1	No data available	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified Oxidizing solids : Category 2

GHS Label: X R C



Pictograms or symbols

Warning word: DANGER

Hazard information	Description of precaution
May intensify fire; oxidizer Causes severe skin burns and eye damage Causes serious eye damage May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergy skin reaction Suspected of causing genetic defects May cause cancer Causes damage to organs through prolonged or repeated exposure	Obtain special instructions. Read and understand all safety precautions before handling. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/respiratory protection / face protection during handling. Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands Take off the contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. IN CASE OF FIRE: Use dry sand, powdered fire extinguishing agent, carbon dioxide, water for extinction. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water / shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Store locked up. Store away from heat and combustible materials. Take any precaution to avoid mixing with combustible materials. Dispose of contents/ container in accordance with local/national regulations.

Additional hazard information : With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Chromium(VI) oxide
Chemical formula:	CrO ₃
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	1333-82-0
RTECS#:	GB6650000
TSCA inventory:	listed
EINECS:	2156078

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

Section 5. Fire fighting measures

Extinguishing media:	Use dry sand, powdered fire extinguishing agent, carbon dioxide, water.
Fire fighting:	This material releases oxygen which increases the risk of fire by heating. Remove containers to safe place if possible. Wear self contained breathing apparatus for fire fighting if necessary. The product is nonflammable.

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dust/ fume.
Environmental hazard precautions:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed container as much as possible. Carefully collect remnant and move to a safe place.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling:	Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen. Keep away from heat, sparks and naked flame.
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Precautions to be taken in storage:

General precautions:	Store in a cool, dry place away from incompatible materials.
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Keep container or bottle tightly closed.

Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH (2013): Water-soluble Cr VI compounds TLV-TWA 0.05 mg/m³ (as Cr)
 OSHA (2006) : Chromium (VI) compounds PEL-TWA 0.005 mg/m³ (as Cr)

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, protective gloves.

Section 9. Physical and chemical properties

Color and Form: Red, orthorhombic crystal.

Chemical formula: CrO₃

Atomic weight: 100.0

Melting point: 196 °C

Boiling point: 250 °C (decompose)

Density: 2.7 g/cm³

Solubility: Water: Soluble
 Soluble: Sulfuric acid, nitric acid, ether, ethanol.

Flammable: non-flammable substance

Oxidation: Strong oxidizing

Section 10. Stability and reactivity

Stability: Stable in closed container at room temperature.
 Deliquescent substance.

Reactivity

Incompatibility: Organic materials, bromide, chloride, iodide, hypophosphite, sulfite, sulfide.

Condition to avoid: Moisture, heat.

Section 11. Toxicological information

Acute toxicity: GHS ; No data available

Skin corrosive / irritation: GHS ; Category 1A
 Causes severe skin burns and eye damage.

Serious eyes damage / eye irritation: GHS ; Category 1
 Causes serious eye damage.

Respiratory sensitization: GHS ; Category 1
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitization: GHS ; Category 1 May cause an allergy skin reaction.

Germ cell mutagenicity: GHS ; Category 2 Suspected of causing genetic defects.

Carcinogenicity: GHS ; Category 1A May cause cancer

Chemical Name	ACGIH (2013)	IARC (2013)	NTP (2011)
Chromium(VI) compounds	A1	1	K

ACGIH(2013) A1 Confirmed Human Carcinogen.
 IARC(2013) 1 The agent is carcinogenic to humans..
 NTP(2011) K Known to be human carcinogens

Reproductive toxicity: GHS ; No data available

Specific target organ toxicity —single exposure:	GHS ; No data available
Specific target organ toxicity —repeated exposure:	GHS ; No data available
Aspiration hazard:	GHS ; No data available

Section 12. Ecological information

Ecotoxicity:

Hazards to the aquatic environment

—acute toxicity:	GHS ; No data available
—chronic toxicity:	GHS ; No data available

Hazardous the ozone layer: GHS ; No data available
No Freon or Halon

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential: Cr biological half-life 616 day,
Rate of absorption oral < 0.005, Respiratory tract=0.25

Mobility in soil: No data available

Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed
'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN number:	1463
IATA shipping name:	Chromium trioxide, anhydrous
IATA classification:	Hazardous Class 5.1 Oxidizing substances
Subsidiary risk	6.1, 8
IATA packing group:	II
HS code:	2819.10
Marine pollution:	None

Section 15. Regulatory information

TSCA inventory : listed.

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.