

# SAFETY DATA SHEET

## CHROMIUM TRIOXIDE LAB

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### 1. Identification of the substance/preparation and of the company or firm

#### 1.1 Identification of the substance or preparation:

Catalogue no. : KA158

Product name : Chromium trioxide LAB

Synonym : Chromium(VI) Oxide

#### 1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

#### 1.3 Identification of the company or firm:

Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

Fax no. (61) 2 98997976

#### 1.4 Emergency telephone:

(61) 2 98998169 (9:00am - 5:00 pm) [ Office hours ]

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### 2. Identification of dangers

#### 2.1 Classification of the substance.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Oxidizing solids, Category 1: May cause fire or explosion; strong oxidizer.

Acute toxicity, Oral, Category 3: Toxic if swallowed.

Acute toxicity, Inhalation, Category 2: Fatal if inhaled.

Acute toxicity, Dermal, Category 3: Toxic if contact with skin

Skin corrosion, Category 1A: Causes severe skin burns and eye damage.

Respiratory sensitisation, Category 1: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation, Category 1: May cause an allergic skin reaction.

Germ cell mutagenicity, Category 1B: May cause genetic defects.

Carcinogenicity, Category 1A: H350 May cause cancer.

Reproductive toxicity, Category 2: Suspected of damaging fertility.

Specific Target Organ Toxicity, Single exposure, Respiratory system, Category 3: May cause respiratory irritation.

Specific Target Organ Toxicity, Repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure.

Hazardous to the aquatic environment, Chronic aquatic toxicity, Category 1: Very toxic to aquatic life with long lasting effects.

#### 2.2 Label elements.

Hazard pictograms



Signal words : Danger.

Hazard statements (H) :

H271 : May cause fire or explosion; strong oxidizer.

H301 + H311 : Toxic if swallowed or in contact with skin.

H314 : Causes severe skin burns and eye damage.

H317 : May cause an allergic skin reaction

H330 : Fatal if inhaled.

H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 : May cause respiratory irritation.

H340 : May cause genetic defects.

H350 : May cause cancer.

H361f : Suspected of damaging fertility.

H372 : Causes damage to organs through prolonged or repeated exposure.

H410 : Very toxic to aquatic life with long lasting effects.

Precautionary statements (P) :

P201 : Obtain special instructions before use.

P220 : Keep/Store away from clothing and other combustible materials

P260 : Do not breathe vapours, spray, dust, fume, gas.

P273 : Avoid release to the environment.

P308 + P310 : IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

#### 2.3 Other hazards.

None known.

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### 3. Composition/information on ingredients

#### 3.1 Substance / Preparation.

Chromium trioxide

Formular: CrO<sub>3</sub>

CAS No : 1333-82-0

Molecular weight : 99.99

Contains no other components or impurities which will influence the classification of the product.

#### 3.2 Mixture.

Not applicable.

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### 4. First-aid measures

#### 4.1 Description of first aid measures.

Inhaling: Take the person out into the fresh air. If unconscious, seek urgent medical assistance.

Skin contact: Remove contaminated clothing. Wash skin with water and soap or a suitable skin cleaner.  
Call a physician immediately.

Eyes: Wash with plenty of water, keeping eyelids open. Immediately call in ophthalmologist.

Ingestion: Rinse mouth. Never induce vomiting. Seek immediate medical assistance.

#### 4.2 Most important symptoms and effects, both acute and delayed.

Harmful and Very Toxic Product, can causes serious skin, eye and respiratory burns. Inhalation can cause internal damage.

Swallowing a small quantity will result in serious health hazard. If feeling unwell, seek immediate medical advice.

#### 4.3 Indication of any immediate medical attention and special treatment needed.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Seek immediate medical advice.

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### 5. Fire-fighting measures

#### 5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

#### 5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes will be present. Exposure to combustion or decomposition products can be harmful to your health.

#### 5.3 Advice for firefighters.

Do not enter fire area without proper protective equipment, including respiratory protection.

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

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### 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

#### 6.2 Environmental precautions.

Product Dangerous for the environment. Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains. If the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation.

#### 6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials.

#### 6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

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### 7. Handling and storage

#### 7.1 Precautions for safe handling.

Ensure good ventilation and renewal of the air in the premises. Avoid breathing dust, fume, gas, mist, vapours, spray.

Do not eat, drink or smoke when using this product. Keep the product in containers made of a material identical to the original.

#### 7.2 Conditions for safe storage, including any incompatibilities.

Well sealed containers. Dry atmosphere. Away from sources of ignition and heat. Prevent the entry of non-authorised persons.

#### 7.3 Specific end use(s).

None.

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## 8. Exposure controls/personal protection

### 8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.

The product does NOT contain substances with Biological Limit Values.

### 8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Hygiene measures : Remove contaminated clothing. Wash hands before breaks and when the job is done.

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties.

Appearance:	Solid.
Colour:	Dark purplish-red flakes.
Odour:	Odourless.
Odour threshold:	No data available.
pH value:	No data available.
Melting Point:	No data available.
Boiling Point:	No data available.
Flash point:	196 °C
Flammability (solid, gas) :	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Lower Explosive Limit:	No data available.
Upper Explosive Limit:	No data available.
Solubility:	63 g/100ml @ 20°C
Density:	2.7 g/cm <sup>3</sup> @ 20°C
Relative density	No data available.
Partition coefficient (n-octanol/water):	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

### 9.2 Other information.

None.

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## 10. Stability and reactivity

### 10.1 Reactivity.

Strong oxidising agent.

### 10.2 Chemical stability.

Stable under room temperature. Store away oxidising agents and highly acidic or alkaline materials.

### 10.3 Possibility of hazardous reactions.

May intensify fire; oxidiser.

### 10.4 Conditions to avoid.

Avoid contact with incompatible materials and improper handling.

### 10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials.

### 10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated corrosive/oxidizing vapors or gases.

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## 11. Toxicological information

### 11.1 Information on toxicological effects.

Acute toxicity.	LD50 oral rat : 52 mg/kg
Inhalation:	Fatal if inhaled.
Dermal:	Toxic if contact with skin.
Ingestion:	Toxic if swallowed.
Corrosion:	Causes severe skin burns and eye damage.
Irritation:	Based on available data, the classification criteria are not met.
Sensitization:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Mutagenicity:	May cause genetic defects.
Carcinogenicity:	May cause cancer.
Toxic for reproduction:	Suspected of damaging fertility.
STOT-single exposure:	Specific Target Organ Toxicity, Single exposure, Respiratory system, Category 3: May cause respiratory irritation.

STOT-repeated exposure: Specific Target Organ Toxicity, Repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

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## 12. Ecological information

### 12.1 Toxicity.

Toxicity to Aquatic invertebrates.

EC50 Daphnia magna : 0.162 mg/l; 48h

### 12.2 Persistence and Degradability.

Biodegradable.

### 12.3 Bioaccumulative potential.

Not established.

### 12.4 Mobility in soil

Not established.

### 12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

### 12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

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## 13. Disposal considerations

### 13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

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## 14. Transport information

### 14.1 UN number.

UN No: UN1463

### 14.2 UN proper shipping name.

ADR: UN 1463 CHROMIUM TRIOXIDE, ANHYDROUS, 5.1 (8), II, (E), ENVIRONMENTALLY HAZARDOUS

IMDG: UN 1463 CHROMIUM TRIOXIDE, ANHYDROUS, 5.1 (8), II, ENVIRONMENTALLY HAZARDOUS

ICAO: UN 1463 CHROMIUM TRIOXIDE, ANHYDROUS, 5.1 (8), II, ENVIRONMENTALLY HAZARDOUS

### 14.3 Transport hazard class(es).

Class(es): 5.1 (8)

### 14.4 Packing group.

Packing group: II

### 14.5 Environmental hazards.

Marine pollutant: Yes.

Dangerous for the environment.

### 14.6 Special precautions for user.

Labels: 5.1, 8

Hazard number: 58

ADR LQ: 1kg

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A, S-Q

Proceed in accordance with point 6.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

Not applicable

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## 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

### 15.2 Chemical safety assessment.

Not Scheduled.

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## 16. Other Information

Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Review number and date.

v. 1.0

Date published.

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Further information.

None.

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In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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