HURST SCIENTIFIC

Safety Data Sheet
Chromic Acid <10%

SECTION 1: Identification

GHS Product identifier

Product name	Chromic Acid <10%
Product number	CA-10%-500M, 1L, 2.5L, 5L
Brand	Hurstchem

Other means of identification

Chromium Trioxide solution.

Recommended use of the chemical and restrictions on use

Laboratory Reagent

Supplier's details

Name	Hurst Scientific
Address	2/36 Hensbrook Loop 6112 Forrestdale WA Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

General hazard statement

Classified as a Hazardous substance according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as a Dangerous goods according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

Classification of the substance or mixture

GHS classification in accordance with: Model WHS Regulations 2016

- Acute toxicity, oral, Cat. 4
- Acute toxicity, dermal, Cat. 3
- Skin corrosion/irritation, Cat. 1A

- Eye damage/irritation, Cat. 1
- Sensitization - respiratory, Cat. 1
- Sensitization - skin, Cat. 1
- Germ cell mutagenicity, Cat. 1B
- Reproductive toxicity, Cat. 2
- Specific target organ toxicity, repeated exposure, Cat. 2
- Hazardous to the aquatic environment, long-term (chronic), Cat. 2

GHS label elements, including precautionary statements

Pictograms

1. Skull and crossbones; 2. Health hazard; 3. Corrosion; 4. Environment

Signal word	**Danger**

Hazard statement(s)

H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340	May cause genetic defects [route]
H361	Suspected of damaging fertility or the unborn child [effect, route]
H373	May cause damage to organs [organs] through prolonged or repeated exposure [route]
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P203	Obtain, read and follow all safety instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash … thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...
P284	[In case of inadequate ventilation] wear respiratory protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316	Get emergency help immediately.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. CHROMIUM TRIOXIDE

Concentration	< 10 %
CAS no.	1333-82-0

2. Water

Concentration	Balance
CAS no.	7732-18-5

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Evacuate to fresh air immediately. If unconscious place in recovery position, provide artificial respiration if breathing ceases using a suitable apparatus – NOT mouth-mouth. Seek immediate medical attention.
In case of skin contact	Remove contaminated clothing and flush affected area with water until told to stop by the Poisons Information Centre. Seek immediate medical attention.
In case of eye contact	Flush eyes with copious amounts of water for at least 15 minutes. Seek immediate medical attention.
If swallowed	DO NOT induce vomiting. Rinse mouth out with water. Seek immediate medical attention.

Personal protective equipment for first-aid responders
Eye wash station, safety shower and First Aid kit.

Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Use media appropriate for other material involved in fire.

Specific hazards arising from the chemical
Toxic gases may evolve.

Special protective actions for fire-fighters
Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment.

Further information
Hazchem code 2X

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear appropriate protective clothing. Ensure adequate ventilation and avoid contact with skin and eyes, do not breathe mist/vapour. If possible, contain the spill. Evacuate all unnecessary personnel.

Methods and materials for containment and cleaning up

Absorb with vermiculite or similar and place into a suitably labelled container. Dispose of waste according to local authority guidelines. Wash the affected area with a large volume of water. Do not contaminate drains or waterways.

SECTION 7: Handling and storage

Precautions for safe handling
Use only in an adequately ventilated area. Avoid breathing in mists or vapours. Wear appropriate protective clothing to avoid any exposure and practice good personal hygiene. Always add material to water and NEVER water to material.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated flammable liquid storage area out of direct sunlight and away from sources of ignition. Keep container tightly closed when not in use. Decomposition may occur after prolonged storage.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 1333-82-0 (EC: 215-607-8)
CHROMIUM TRIOXIDE
AU/SWA: 0.05mg/m3 TWA air

Appropriate engineering controls
Ensure adequate ventilation to maintain airborne concentrations below national exposure standards.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Safety glasses or goggles,

Skin protection
Chemical-resistant gloves and laboratory coat.

Body protection
Biological Limit Values Not available for this product.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Color	Red-Orange
Odor	Odourless
Melting point/freezing point	Not available
Boiling point or initial boiling point and boiling range	100°C
Flammability	Non-flammable
Lower and upper explosion limit/flammability limit	Not available
pH	1.1
Solubility	Water Soluble
Vapor pressure	Not available
Density and/or relative density	Not available
Relative vapor density	Not available

SECTION 10: Stability and reactivity

Reactivity
Non-reactive under recommended conditions for use and storage. Corrosive in contact with metals.

Chemical stability
Stable under recommended conditions for use and storage.

Possibility of hazardous reactions
Polymerisation will not occur.

Conditions to avoid
Avoid incompatible materials, excess heat and combustible materials.

Incompatible materials
Combustibles, acids, alcohol, organic substances and reducing agents.

Hazardous decomposition products
Toxic gases may evolve.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
HEALTH EFFECTS:
ACUTE:

Eye Contact	Vapours cause redness, lacrimation, pain and burns.
Skin Contact	Product is corrosive. Will cause irritation, resulting in redness and pain and can cause burns. Can cause allergic skin reaction.
Inhalation	After inhalation of the vapour, the respiratory tract (mucous membranes) are irritated causing coughing, nausea, vomiting, drowsiness, dizziness and headache.
Ingestion	Corrosive product. Can cause severe swelling, damage and danger of perforation of stomach or oesophagus.

Skin corrosion/irritation
Category 1A.

Serious eye damage/irritation
Category 1.

Respiratory or skin sensitization
Category 1.

Germ cell mutagenicity
Category 1B.

Carcinogenicity
Category 1 Carcinogen according to IARC monographs. Carcinogenic to humans.

Reproductive toxicity
Category 2 – Lab tests have shown toxic effects, developmental and teratogenic effects.

Specific target organ toxicity (STOT) - single exposure
No classification available.

Specific target organ toxicity (STOT) - repeated exposure
Category 2 – Eyes, skin, gastrointestinal tract, Liver, Blood, Lungs, Kidney and Respiratory system.

Aspiration hazard
No classification available.

Additional information
TOXICITY DATA:
Inhalation LC50 (Rat): 0.217mg/L/4h
Oral LD50 (Rat): 80 mg/kg
Dermal LD50 (Rabbit): 55mg/kg

SECTION 12: Ecological information

Toxicity
Toxic to aquatic organisms and may cause long-term adverse effects. Colisa Fasciatus LC50: 40mg/l (96hr).

Persistence and degradability
No data available for this product.

Bioaccumulative potential
Not expected to bio-accumulate.

Mobility in soil
No data available for this product.

Other adverse effects
Environmental fate (exposure) Do not contaminate drains and waterways.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Dispose of in accordance with local authority guidelines. Empty containers may still represent a hazard.

Packaging disposal
Dispose of in accordance with local authority guidelines. Empty containers may still represent a hazard.

Other disposal recommendations
Special precautions Nil.

SECTION 14: Transport information

UN Number	1755
Hazchem emergency action code (EAC)	2X
UN Proper Shipping Name	Chromic Acid solution
Transport hazard class(es)	8
Packing group	II

Special precautions for user
Nil

SECTION 15: Regulatory information

Chemical Safety Assessment
• Poison Schedule: S6.
• TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day week.

SECTION 16: Other information

Further information/disclaimer

This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). The information contained within is believed to be accurate at the date of preparation/review. hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used.

Preparation information

References

1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).
3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013)
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); Canprint: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).