

Safety Data Sheet

according to WHMIS

PlasmaCAL ICP/ICPMS Standard - Chromium (VI) 1000 µg/ml (Cr)

Revision: 20.01.2025

Product code: AC18.05753

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1. Identification**Product identifier**

PlasmaCAL ICP/ICPMS Standard - Chromium (VI) 1000 µg/ml (Cr)

Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Reagents and laboratory chemicals
Only for laboratory and analysis purposes.

Uses advised against

Do not use for private purposes (household).

Details of the supplier of the safety data sheet**Details of the supplier of the safety data sheet**

Company name: AnalytiChem Services, Unipessoal, Lda
Street: Rua de Júlio Dinis 676 7º
Place: P-4050-320 Porto
Telephone: +351 226002917
E-mail: info@analytichem.com
Contact person: SDS service department
E-mail: SDS@analytichem.com
Internet: www.analytichem.com
Responsible Department: SDS service department

Supplier or manufacturer details

Company name: AnalytiChem Canada Inc.
Street: Québec, CANADA
Place: 21800 Clark Graham Ave
CDN-H9X 4B6 Baie-D'Urfé
Telephone: +1 (800) 361-6820 Telefax: +1 (800) 253-5549
E-mail: info@analytichem.com
Contact person: SDS service department
E-mail: SDS@analytichem.com
Internet: www.analytichem.com
Responsible Department: AnalytiChem:
EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20
EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200
EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848
UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500
USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378
Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701
Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333
Emergency telephone number: +1 703-741-5970 (CHEMTREC)

Further Information

No data available

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2. Hazard identification

Classification of the substance or mixture

WHMIS 2015

Carcinogenicity: Carc. 1B
Germ cell mutagenicity: Muta. 1B
Reproductive toxicity: Repr. 1B
Respiratory or skin sensitization: Resp. Sens. 1
Respiratory or skin sensitization: Skin Sens. 1

Label elements

WHMIS 2015

Signal word: Danger

Pictograms:



Hazard statements

May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.

Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing and eye protection/face protection.
Wear respiratory protection.
IF ON SKIN: Wash with plenty of water and soap.
Take off contaminated clothing and wash it before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point.

Other hazards

No data available

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixtures in aqueous solution

Relevant ingredients

CAS No	Chemical name	Quantity
7789-09-5	ammonium dichromate	0.1 - < 1 % (*)

(*) The actual concentration is withheld as a trade secret.

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Further Information

No data available

4. First-aid measures**Description of first aid measures****General information**

Self-protection of the first aider
Do not breathe vapour/aerosol.

After inhalation

Provide fresh air.
Call a physician immediately.

After contact with skin

Wash immediately with: Water
Take off immediately all contaminated clothing and wash it before reuse.
Call a physician immediately.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Remove contact lenses, if present and easy to do. Continue rinsing.
Protect uninjured eye.

After ingestion

Rinse mouth immediately and drink plenty of water.
Call a physician immediately.

Most important symptoms and effects, whether acute or delayed

Irritant
Cough
Dyspnoea
Allergic reactions
Risk of serious damage to eyes.
Gastrointestinal complaints
Pneumonia
Spasms
Circulatory collapse
Unconsciousness
Methaemoglobin formation
Liver and kidney damage
Vomiting

Indication of immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

Specific hazards arising from the hazardous product

Non-combustible liquids
Hazardous combustion products

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In case of fire may be liberated: Metal oxide smoke, toxic

Special protective equipment and precautions for fire-fighters

Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures****General advice**

Do not breathe vapour/aerosol.

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up**For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Take up carefully when dry. Take up dust-free and set down dust-free.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

Avoid exposure - obtain special instructions before use.

Read label before use. Handle and open container with care.

Do not breathe vapour/aerosol.

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When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Make available sufficient washing facilities

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash

hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Store in a well-ventilated place. Keep container tightly closed.

Store in a place accessible by authorized persons only.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Store in a dry place.

8. Exposure controls/Personal protection**Control parameters****Exposure limits (ACGIH)**

CAS No	Chemical name	ppm	mg/m ³	Category	Origin
-	Chromium: Hexavalent chromium compounds, water-soluble, as Cr(VI) (inhalable particulate matter)		0.0002	TWA (8 h)	ACGIH-2025
			0.0005	STEL (15 min)	ACGIH-2025

Biological limit values

CAS No	Chemical name	Parameter	Value	Test material	Sampling time
-	CHROMIUM (ACGIH 2025)	Total chromium	0.7 µg/L	urine	End of shift at end of workweek

Exposure controls**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Do not breathe vapour/aerosol.

Individual protection measures, such as personal protective equipment**Eye/face protection**

goggles

Wear eye protection/face protection.

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Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	clear	
Odour:	odourless	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability:		No data available
Lower explosive limits:		No data available
Upper explosive limits:		No data available
Flash point:		not applicable
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility:		No data available
Solubility in other solvents		
No data available		
Dissolution rate:		No data available
Partition coefficient n-octanol/water:		No data available
Dispersion stability:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density (at 22 °C):		0.999 g/cm ³
Relative density:		No data available
Bulk density:		No data available
Relative vapour density:		No data available
Particle characteristics:		No data available

Other information

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Information with regard to physical hazard classes

Explosive properties

No data available

Sustained combustibility:

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

0%

Solid content:

0%

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

No data available:

Viscosity / dynamic:

No data available

Flow time:

No data available

Further Information

No data available

10. Stability and reactivity**Reactivity**

No data available

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

No data available

Hazardous decomposition products

In case of fire may be liberated:

in case of fire, see: SECTION 5: Firefighting measures

Further information

No data available

11. Toxicological information**Information on toxicological effects****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

Acute toxicity

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

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ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Route of exposure	Dose		Species	Source	Method
7789-09-5	ammonium dichromate					
	oral	LD50 mg/kg	53,75	Rat	IUCLID	
	dermal	LD50 mg/kg	1640	Rabbit	IUCLID	
	inhalation vapour	ATE	0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 mg/l	0,156	Rat	IUCLID	

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (ammonium dichromate)

May cause an allergic skin reaction. (ammonium dichromate)

Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. (ammonium dichromate)

May cause genetic defects. (ammonium dichromate)

May damage fertility or the unborn child. (ammonium dichromate)

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

Information on other hazards**Endocrine disrupting properties**

There are no data available on the mixture itself.

Other information

There are no data available on the mixture itself.

Further information

corrosive

Irritant

Cough

Dyspnoea

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Allergic reactions
Risk of serious damage to eyes.
Gastrointestinal complaints
Pneumonia
Spasms
Circulatory collapse
Unconsciousness
Methaemoglobin formation
Liver and kidney damage
Vomiting

12. Ecological information**Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential

There are no data available on the mixture itself.

Mobility in soil

There are no data available on the mixture itself.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other adverse effects

Discharge into the environment must be avoided.

Further information

Do not allow to enter into surface water or drains.

13. Disposal considerations**Waste treatment methods****Disposal recommendations**

Send to a physico-chemical treatment facility under observation of official regulations.
Dispose of waste according to applicable legislation.
Do not allow to enter into surface water or drains.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

14. Transport information**Canadian TDG****Proper shipping name:**

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)**UN number or ID number:**

No dangerous good in sense of this transport regulation.

United Nations proper shipping name:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)**UN number or ID number:**

No dangerous good in sense of this transport regulation.

United Nations proper shipping name:

No dangerous good in sense of this transport regulation.

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Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

15. Regulatory information**Canadian regulations****Provincial regulations**

To follow: Current occupational exposure limits for Ontario workplaces under Regulation 833

16. Other information**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Provide appropriate information, instructions and training to users

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)