

**PlasmaCAL custom calibration standard for ICP-AES and ICP-MS**

Revision: 10.07.2024

Product code: AC18.11023

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**1. Identification**
**Product identifier**

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

**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**
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Company name:	AnalytiChem Services, Unipessoal, Lda
Street:	Rua de Júlio Dinis 676 7º
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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.	
	Québec, CANADA	
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Place:	CDN-H9X 4B6 Baie-D'Urfé	
Telephone:	+1 (800) 361-6820	Telefax: +1 (800) 253-5549
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E-mail:	SDS@analytichem.com	
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	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	
<b>Emergency telephone number:</b>	+1 703-741-5970 (CHEMTREC)	

**Further Information**

No data available

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**2. Hazard identification**
**Classification of the substance or mixture**
**Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

**Label elements**
**Other hazards**

No data available

**3. Composition/information on ingredients**
**Mixtures**
**Chemical characterization**

Mixtures in aqueous solution

**Relevant ingredients**

none (according to Regulation (EC) No 1907/2006 (REACH))

**Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

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

No data available

**After inhalation**

Provide fresh air.

**After contact with skin**

Wash immediately with: Water

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

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

Call a doctor if you feel unwell.

**Most important symptoms and effects, whether acute or delayed**

No data available

**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

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**Specific hazards arising from the hazardous product**

Non-combustible liquids

**Special protective equipment and precautions for fire-fighters**

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

**Additional information**

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**

No data available

**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**

Wipe up with absorbent material (eg. cloth, fleece).

**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**

Handle and open container with care.  
 Do not breathe vapour/aerosol.  
 Avoid contact with skin, eyes and clothes.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Wash contaminated clothing prior to re-use.  
 Do not breathe vapour/aerosol.

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Avoid contact with skin, eyes and clothes.

**Further information on handling**

Wash contaminated clothing before reuse.

Wash hands before breaks and after work.

**Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Keep container tightly closed.

**Hints on joint storage**

No data available

**Further information on storage conditions**

Store in a dry place.

**Specific end use(s)**

Laboratory chemicals

**8. Exposure controls/Personal protection**

**Control parameters**

**Exposure controls**

**Appropriate engineering controls**

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

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

goggles

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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.

**Skin protection**

Wear suitable protective clothing.

Wash hands before breaks and after work.

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

**Thermal hazards**

No data available

**Environmental exposure controls**

Discharge into the environment must be avoided.

**9. Physical and chemical properties**

**Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	colourless	
Odour:	odourless	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		~100 °C
Flammability:		No data available

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Lower explosive limits:	No data available
Upper explosive limits:	No data available
Flash point:	No data available
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:	~1,003 g/cm <sup>3</sup>
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

**Other information**

**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**

No data available

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**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

No data available

**Incompatible materials**

No data available

**Hazardous decomposition products**

No data available

**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.

**ATEmix calculated**

ATE (oral) &gt; 5000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

**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**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

**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**

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

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**Other information**

There are no data available on the mixture itself.

**Further information**

There are no data available on the mixture itself.

**12. Ecological information**

**Ecotoxicity**

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

**Persistence and degradability**

There are no data available on the mixture itself.

**Bioaccumulative potential**

There are no data available on the mixture itself.

**Mobility in soil**

There are no data available on the mixture itself.

**Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**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**

There are no data available on the mixture itself.

**Further information**

Discharge into the environment must be avoided.

**13. Disposal considerations**

**Waste treatment methods**

**Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

**Contaminated packaging**

Waste codes/waste designations according to EWC/AVV

**14. Transport information**

**Land transport (ADR/RID)**

**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.

**Inland waterways transport (ADN)**

**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.

**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.

**name:**

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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.

**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.

**Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**Packing group:** No dangerous good in sense of this transport regulation.

**Special precautions for user**

No dangerous good in sense of this transport regulation.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

No dangerous good in sense of this transport regulation.

**15. Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulatory information**

Water hazard class (D): - - non-hazardous to water

**Additional information**

No data available

**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.)*