# Safety Data Sheet

according to 29 CFR 1910.1200(g)

## PlasmaCAL ICP/ICPMS Standard – Silicon 10000 µg/ml (Si)



## 1. Identification

**Product identifier**

PlasmaCAL ICP/ICPMS Standard – Silicon 10000 µg/ml (Si)

**Recommended use of the chemical and restrictions on use**

**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<br>Unipessoal Lda |
| Street: | Rua de Júlio Dinis 676 7º |
| Place: | P-4050-320 Porto |
| Contact person: | SDS service department |
| E-mail: | SDS@analytichem.com |
| Responsible Department: | SDS service department |

**Supplier or manufacturer details**

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

**Emergency phone number:** +1 703-741-5970 (CHEMTREC)

**Further Information**

No data available

## 2. Hazard(s) identification

**Classification of the chemical**

**29 CFR Part 1910.1200**

Acute toxicity: Acute Tox. 4 (oral)

**Label elements**

**29 CFR Part 1910.1200**

**Signal word:** Warning

**Pictograms:**

**Hazard statements**

Harmful if swallowed

**Precautionary statements**

Dispose of contents/container to hazardous or special waste collection point.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.

**Hazards not otherwise classified**

No data available

## 3. Composition/information on ingredients

**Mixtures**

**Chemical characterization**

Mixtures in aqueous solution

**Relevant ingredients**

| CAS No | Components | Quantity |
|---|---|---|
| 16919-19-0 | ammonium hexafluorosilicate | 6.34 % |

**Further Information**

No data available

## 4. First-aid measures

**Description of first aid measures**

**General information**

Self-protection of the first aider

**After inhalation**

Provide fresh air.
Call a doctor if you feel unwell.

**After contact with skin**

Wash immediately with: Water
Take off immediately all contaminated clothing and wash it before reuse.
In case of skin irritation, consult a physician.

**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.

**After ingestion**

Rinse mouth immediately and drink plenty of water.
Do NOT induce vomiting. Do not allow a neutralisation agent to be drunk.

**Most important symptoms and effects, both acute and delayed**

Irritant

Methaemoglobinaemia

**Indication of any 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 data available

**Specific hazards arising from the chemical**

Non-combustible liquids

Hazardous combustion products

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

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

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

**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 vapor or spray.

**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/vapors/spray.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment (PPE): 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).

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Collect in closed and suitable containers for disposal.

**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/vapors/spray.
Wear breathing apparatus if exposed to vapors/dusts/aerosols.

**Reference to other sections**

Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

## 7. Handling and storage

**Precautions for safe handling**

**Advice on safe handling**

Read label before use. Handle and open container with care.
When using do not eat, drink, smoke, sniff. Use personal protection equipment.
Provide adequate ventilation. Avoid contact with skin, eyes and clothes.
Do not breathe vapor or spray. Use extractor hood (laboratory).

**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. 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. Avoid: aerosol or mist formation Do not breathe vapor or spray.

**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.

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

**Requirements for storage rooms and vessels**

Corrosive to metals.
Unsuitable container/equipment material: Metal
The product develops hydrogen in an aqueous solution in contact with metals.

**Hints on joint storage**

national regulations

**Further information on storage conditions**

Keep container tightly closed.

## 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.
If handled uncovered, arrangements with local exhaust ventilation have to be used.
Do not breathe vapor or spray.

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

**Eye/face protection**

goggles
Wear eye/face protection.

**Hand protection**

Tested protective gloves must be worn
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**

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

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation
The entrepeneur 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. A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant a respirator's use.

**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 |
| Color: | colorless |
| Odor: | odorless |
| 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 explosion limits: | No data available |
| Upper explosion 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 |
| Vapor pressure: | No data available |
| Vapor pressure: | No data available |
| Density (at 22 °C): | ~1.035 g/cm³ |
| 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: | No data available |
| Solid content: | No data available |
| 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**

Alkali (lye)

**Conditions to avoid**

No data available

**Incompatible materials**

Cellulose
Metal
The product develops hydrogen in an aqueous solution in contact with metals.

**Hazardous decomposition products**

In case of fire may be liberated:
SECTION 5: Fire fighting measures

**Further information**

No data available

## 11. Toxicological information

**Route(s) of Entry**

There are no data available on the mixture itself.

**Information on toxicological effects**

**Toxicocinetics, metabolism and distribution**

There are no data available on the mixture itself.

**Acute toxicity**

Harmful if swallowed

**ATEmix calculated**

ATE (oral) 1577 mg/kg; ATE (dermal) > 2000 mg/kg

| CAS No | Components | | | | |
|---|---|---|---|---|---|
| | Exposure route | Dose | Species | Source | Method |
| 16919-19-0 | ammonium hexafluorosilicate | | | | |
| | oral | ATE 100 mg/kg | | | |
| | dermal | ATE 300 mg/kg | | | |
| | inhalation vapour | ATE 3 mg/l | | | |
| | inhalation dust/mist | ATE 0,5 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.

**Specific target organ toxicity (STOT) - single exposure**

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

**Specific target organ toxicity (STOT) - repeated exposure**

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

Carcinogenicity (OSHA): No ingredient of this mixture is listed.
Carcinogenicity (IARC): No ingredient of this mixture is listed.
Carcinogenicity (NTP): No ingredient of this mixture is listed.

**Aspiration hazard**

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

**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 non-target organisms as no components meets the criteria.

**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

**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**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Send to a physico-chemical treatment facility under observation of official regulations.
Do not empty into drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## 14. Transport information

**U.S. DOT 49 CFR 172.101**

| | |
|---|---|
| **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. |
| **UN 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. |
| **UN 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. |

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**Special precautions for user**

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

## 15. Regulatory information

**U.S. Regulations**

**National regulatory information**

SARA Section 304 CERCLA:
Ammonium silicofluoride (16919-19-0): Reportable quantity = 1,000 (454) lbs. (kg)
SARA Section 311/312 Hazards:
Ammonium silicofluoride (16919-19-0): Immediate (acute) health hazard

**State Regulations**

**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## 16. Other information

| | |
|---|---|
| Revision date: | 09/04/2025 |
| Revision No: | 1,00 |

**Other data**

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.)*