

**CONOSTAN®Zirconium (Zr) Standard**

Revision: 11.06.2024

Product code: AC18.05881

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

CONOSTAN®Zirconium (Zr) Standard

**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.  |                            |
|                         | Québec, CANADA   |                            |
| Street:                 | 21800 Clark Graham Ave   |                            |
| Place:                  | 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 |                            |
|                         | +1 703-741-5970 (CHEMTREC)   |                            |

**Emergency telephone number:**
**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**
**Relevant ingredients**

| CAS No    | Chemical name                                 |          |          | Quantity |
|-----------|---|----------|----------|----------|
|           | EC No   | Index No | REACH No |          |
|           | Classification (Regulation (EC) No 1272/2008) |          |          |          |
| 8042-47-5 | White mineral oil, petroleum                  |          |          | 100 %    |
|           | 232-455-8                                     |          |          |          |

Full text of H statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No    | EC No  | Chemical name                            | Quantity |
|-----------|--|--|----------|
|           |  | Specific Conc. Limits, M-factors and ATE |          |
| 8042-47-5 | 232-455-8  | White mineral oil, petroleum             | 100 %    |
|           | dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg |  |          |

**Further Information**

Zirconium Alkyl aryl Sulfonate (% as Zr) &lt;1%

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.

Call a doctor if you feel unwell.

**After contact with skin**

Wash immediately with: Water, Soap

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

In case of skin irritation, consult a physician.

**After contact with eyes**

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

In case of eye irritation consult an ophthalmologist.

**After ingestion**

Observe risk of aspiration if vomiting occurs.

Call a physician immediately.

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

Gastrointestinal complaints  
Pneumonia

**Indication of immediate medical attention and special treatment needed**

Treat symptomatically.

**5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing media**

Foam  
Carbon dioxide (CO<sub>2</sub>)  
Extinguishing powder  
Water

**Unsuitable extinguishing media**

no restriction

**Specific hazards arising from the hazardous product**

Combustible liquids  
Hazardous combustion products  
In case of fire may be liberated:  
Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
In case of warming:  
Vapours are heavier than air, spread along floors and form explosive mixtures with air.

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

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.  
Use water spray jet to protect personnel and to cool endangered containers.  
Move undamaged containers from immediate hazard area if it can be done safely.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**General advice**

In case of warming:  
Vapours are heavier than air, spread along floors and form explosive mixtures with air.  
Take precautionary measures against static discharges.

**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**

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

**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**

- Read label before use. Handle and open container with care.
- When using do not eat, drink, smoke, sniff. Keep container tightly closed.
- Use personal protection equipment.
- Do not breathe vapour/aerosol.
- Provide adequate ventilation.

**Advice on protection against fire and explosion**

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Take precautionary measures against static discharges.
- In case of warming:
  - Vapours are heavier than air, spread along floors and form explosive mixtures with air.

**Advice on general occupational hygiene**

- Keep away from food, drink and animal feedingstuffs.
- 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.

**Further information on handling**

- Take off immediately all contaminated clothing and wash it before reuse.
- Draw up and observe skin protection programme.
- Wash hands and face before breaks and after work and take a shower if necessary.

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

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

**Hints on joint storage**

TRGS 510

**Further information on storage conditions**

- Keep cool. Protect from sunlight.

**Specific end use(s)**

Laboratory chemicals

**8. Exposure controls/Personal protection**

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**Control parameters**
**Exposure limits (ACGIH)**

| CAS No | Chemical name   | ppm | mg/m <sup>3</sup> | Category  | Origin     |
|--------|---|-----|-------------------|-----------|------------|
| -      | Mineral oil, excluding metal working fluids (inhalable fraction); Pure, highly and severely refined |     | 5                 | TWA (8 h) | ACGIH-2025 |

**DNEL/DMEL values**

| CAS No                   | Chemical name                | Exposure route | Effect   | Value                 |
|--------------------------|------------------------------|----------------|----------|-----------------------|
| 8042-47-5                | White mineral oil, petroleum |                |          |                       |
| Worker DNEL, long-term   |                              | inhalation     | systemic | 160 mg/m <sup>3</sup> |
| Worker DNEL, long-term   |                              | dermal         | systemic | 220 mg/kg bw/day      |
| Consumer DNEL, long-term |                              | inhalation     | systemic | 35 mg/m <sup>3</sup>  |
| Consumer DNEL, long-term |                              | dermal         | systemic | 93 mg/kg bw/day       |
| Consumer DNEL, long-term |                              | oral           | systemic | 40 mg/kg bw/day       |

**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.

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

goggles

Face protection umbrella

**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. 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**

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

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

Draw up and observe skin protection programme.

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

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.

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**9. Physical and chemical properties**

**Information on basic physical and chemical properties**

|   |                    |                           |
|---|--------------------|---------------------------|
| Physical state:   | Liquid             |                           |
| Colour:   | colourless         |                           |
| Odour:  | like: Hydrocarbons |                           |
| Odour threshold:  | No data available  |                           |
| Melting point/freezing point:                             |                    | No data available         |
| Boiling point or initial boiling point and boiling range: |                    | >315 °C                   |
| Flammability:   |                    | No data available         |
| Lower explosive limits:                                   |                    | No data available         |
| Upper explosive limits:                                   |                    | No data available         |
| Flash point:  |                    | >210 °C                   |
| Auto-ignition temperature:                                |                    | No data available         |
| Decomposition temperature:                                |                    | No data available         |
| pH-Value:   |                    | No data available         |
| Viscosity / kinematic:                                    |                    | 75 mm <sup>2</sup> /s     |
| Water solubility:   |                    | No data available         |
| Solubility in other solvents                              |                    | No data available         |
| 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 15,6 °C):                                     |                    | 0,6-0,9 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  |                   |
| In case of warming:   |                   |
| Vapours are heavier than air, spread along floors and form explosive mixtures with air. |                   |
| 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:         | 100%              |
| Solid content:           | No data available |
| Sublimation point:       | No data available |
| Softening point:         | No data available |
| Pour point:              | No data available |

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Viscosity / dynamic:

No data available

Flow time:

No data available

No data available

**Further Information**

No data available

**10. Stability and reactivity**

**Reactivity**

In case of warming:

Vapours may form explosive mixtures with air.

**Chemical stability**

The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**

Oxidising agent

**Conditions to avoid**

Heat

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Incompatible materials**

No data available

**Hazardous decomposition products**

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**

No data available

**Acute toxicity**

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

**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             |
| 8042-47-5 | White mineral oil, petroleum |                   |         |                     |                    |
|           | oral                         | LD50 > 5000 mg/kg | Rat     | Study report (1987) | OECD Guideline 401 |
|           | dermal                       | LD50 > 2000 mg/kg | Rabbit  | Study report (1987) | OECD Guideline 402 |

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**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. slightly irritant but not relevant for classification.

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

May cause respiratory irritation.

**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**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**Information on other hazards**
**Endocrine disrupting properties**

No data available

**Other information**

No data available

**Further information**

Gastrointestinal complaints

Pneumonia

**12. Ecological information**
**Ecotoxicity**

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

| CAS No    | Chemical name                |                   |           |                     |                            |   |
|-----------|------------------------------|-------------------|-----------|---------------------|----------------------------|---|
|           | Aquatic toxicity             | Dose              | [h]   [d] | Species             | Source                     | Method                                  |
| 8042-47-5 | White mineral oil, petroleum |                   |           |                     |                            |   |
|           | Acute fish toxicity          | LC50 > 10000 mg/l | 96 h      | Lepomis macrochirus | REACH Registration Dossier | Method: other: procedure as detailed in |
|           | Acute crustacea toxicity     | EC50 > 100 mg/l   | 48 h      | Daphnia magna       | Study report (2008)        | OECD Guideline 202                      |

**Persistence and degradability**

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No data available

**Bioaccumulative potential**

No data available

**Partition coefficient n-octanol/water**

| CAS No    | Chemical name                | Log Pow |
|-----------|------------------------------|---------|
| 8042-47-5 | White mineral oil, petroleum | > 6     |

**Mobility in soil**

No data available

**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**

Do not allow to enter into surface water or drains.

**Further information**

Avoid release to the environment.

**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 allow to enter into surface water or drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.  
 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.  
**Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**Packing group:** No dangerous good in sense of this transport regulation.

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**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.

**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 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**
**EU Regulatory information**

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

**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

**Identified uses**

| No | Short title | LCS | SU | PC | PROC | ERC | AC | TF | Specification |
|----|-------------|-----|----|----|------|-----|----|----|---------------|
| 1  | PC21        | -   | -  | 21 | 15   | -   | -  | -  |               |
| 2  | PROC15      | -   | -  | -  | 15   | -   | -  | -  |               |

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

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