

CONOSTAN® Single Element Standard – Bismuth (Bi)

Revision: 24.10.2025

Product code: AC18.05858

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1. Identification
Product identifier

CONOSTAN® Single Element Standard – Bismuth (Bi)

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

Asp. Tox. 1; H304

Full text of hazard statements: see SECTION 16.

Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

White mineral oil, petroleum

Signal word: Danger

Pictograms:



Hazard statements

H304 May be fatal if swallowed and enters airways.

Precautionary statements

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331 Do NOT induce vomiting.
- P405 Store locked up.
- P501 Dispose of contents/container to an appropriate recycling or disposal facility.

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 | |
| | Asp. Tox. 1; H304 | |

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

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).

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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.

Most important symptoms and effects, whether acute or delayed

Gastrointestinal complaints

Pneumonia

Vapours may cause drowsiness and dizziness.

Dizziness

Depression of central nervous system

Headache

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Foam

Carbon dioxide (CO₂)

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 (CO₂)

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.

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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

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.

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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
Control parameters
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 ³ |
| Worker DNEL, long-term | | dermal | systemic | 220 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 35 mg/m ³ |
| 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

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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.

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: | | 93-99 °C |
| Auto-ignition temperature: | | No data available |
| Decomposition temperature: | | No data available |
| pH-Value: | | No data available |
| Viscosity / kinematic: | | 14,2-17 mm ² /s |
| 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: | | 0,6-0,9 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

Information with regard to physical hazard classes

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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

No data available

Viscosity / dynamic:

No data available

Flow time:

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.

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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 |
| 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 |

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

May be fatal if swallowed and enters airways.

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
 Vapours may cause drowsiness and dizziness.
 Dizziness

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Depression of central nervous system
Headache

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

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.

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| | |
|---|--|
| <u>United Nations proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |
| Inland waterways transport (ADN) | |
| <u>UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>United Nations proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |
| Marine transport (IMDG) | |
| <u>UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>United Nations proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |
| Air transport (ICAO-TI/IATA-DGR) | |
| <u>UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>United Nations proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |
| <u>Environmental hazards</u> | |
| ENVIRONMENTALLY HAZARDOUS: | No |
| <u>Special precautions for user</u> | |
| No dangerous good in sense of this transport regulation. | |
| <u>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</u> | |
| 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

Restrictions on use (REACH, annex XVII):
Entry 3

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

Abbreviations and acronyms

Asp. Tox. 1: Aspiration hazard

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008

| | |
|-------------------|--------------------------|
| Classification | Classification procedure |
| Asp. Tox. 1; H304 | Calculation method |

Relevant H statements (number and full text)

H304 May be fatal if swallowed and enters airways.

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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

SU: Sectors of use

PC: Product categories

PROC: Process categories

ERC: Environmental release categories

AC: Article categories

TF: Technical functions

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