

according to the Globally Harmonized System

Cleaning solution Thiourea / HCl

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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| Product name | Cleaning solution Thiourea / HCl |
| Synonyms | Diaphragm cleaner (9892) |
| Product code | 52118031, 30045062, 51350102 |

1.2. Relevant identified uses of the substance or mixture and uses advised against

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| Use of the Substance/Mixture | Laboratory chemicals |
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1.3. Details of the supplier of the safety data sheet

| | |
|---|---|
| Company/Undertaking Identification | Mettler-Toledo GmbH Im Langacher 44 CH-8606 Greifensee Switzerland Tel: +41 22 567 53 22 Fax: +41 22 567 53 23 Email: ph.lab.support@mt.com |
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| | |
|--|---|
| 1.4. Emergency telephone number | (24-Hour-Number): GBK GmbH +49 6132 84463 |
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| Issuing date | 12.02.2018 |
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| Version | GHS 2 |
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SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

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| Classification according to Regulation (EC) No. 1272/2008 | Carcinogenicity, Cat. 2, H351 Reproductive toxicity, Cat. 2 (d), H361d Hazardous to the aquatic environment, chronic, Cat. 3, H412 |
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| Additional information | For the full text of the phrases mentioned in this Section, see Section 16. |
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2.2. Label elements



Signal Word

Warning

Hazard Statements

H351: Suspected of causing cancer.
H361d: Suspected of damaging the unborn child.
H412: Harmful to aquatic life with long lasting effects.

Precautionary statements

P201: Obtain special instructions before use.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P273: Avoid release to the environment.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental information

None.

Product identifier

thiourea; thiocarbamide, CAS-No. 62-56-6, EC-No. 200-543-5

Contents of package < 125 ml



Warning
H351: Suspected of causing cancer.
H361d: Suspected of damaging the unborn child.
H412: Harmful to aquatic life with long lasting effects.
P280: Wear protective gloves/ eye protection/ face protection.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| Components | | CLP Classification | Product identifier |
|-------------------------|-----------|---|---|
| Deionised water | 90% - 95% | | CAS-No.: 7732-18-5 EC-No.: 231-791-2 |
| thiourea; thiocarbamide | 5% - 10% | Carc. 2 H351, Repr. 2 H361 (d), Acute Tox. 4 H302, Aquatic Chronic 2 H411 | CAS-No.: 62-56-6 EC-No.: 200-543-5 Index-No: 612-082-00-0 |

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

SECTION 4: First aid measures

4.1. Description of first aid measures

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| Inhalation | Move to fresh air in case of accidental inhalation of vapours or decomposition products. Consult a physician for severe cases. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. |
| Eye contact | Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist. |
| Ingestion | Rinse mouth. Consult a physician for severe cases. |

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| 4.2. Most important symptoms and effects, both acute and delayed | If you feel unwell, seek medical advice (show the label where possible). |
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| 4.3. Indication of any immediate medical attention and special treatment needed | None known. |
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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| Suitable extinguishing media | Use water spray, alcohol-resistant foam, dry extinguishing agent or carbon dioxide. |
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| Extinguishing media which must not be used for safety reasons | None. |
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| 5.2. Special hazards arising from the substance or mixture | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. |
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5.3. Advice for firefighters

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| Special protective equipment for firefighters | Standard procedure for chemical fires. In the event of fire, wear self-contained breathing apparatus. Wear protective suit. |
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| Specific methods | Water mist may be used to cool closed containers. |
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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| Advice for non-emergency personnel | Ensure adequate ventilation. Use personal protective equipment. Sweep up to prevent slipping hazard. Avoid contact with skin and eyes. |
| Advice for emergency responders | Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment. Sweep up to prevent slipping hazard. |

6.2. Environmental precautions Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up Soak up with inert absorbent material. Keep in suitable and closed containers for disposal.

6.4. Reference to other sections See chapter 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Wear personal protective equipment. Practice care and caution to avoid skin contact and inhalation of vapours or mists if generated. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities Store in original container. Storage class 8.

7.3. Specific end use(s) No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s) No data is available on the product itself.

8.2. Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

Personal protection equipment

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment. Respirator with combination filter for vapour/particulate (EN 14387).

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| Hand protection | The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Hydrofluoric acid-resistant and solvent-resistant gloves (gloves made of VITON (R)). |
| Eye protection | Safety glasses with side-shields conforming to EN166. |
| Skin and body protection | Long sleeved clothing. |
| Thermal hazards | No special measures required. |
| Environmental exposure controls | Prevent product from entering surface water or sewage. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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| Appearance | Liquid. |
| Colour | Colourless. |
| Odour | None. |
| Odour Threshold | Not determined. |
| pH: | 1 |
| Melting point/range: | Not determined. |
| Boiling point/range: | Not determined. |
| Flash point: | does not ignite |
| Evaporation Rate: | Not determined. |
| Flammability: | Not determined. |
| Explosion limits: | Not determined. |
| Vapour pressure: | Not determined. |
| Vapor density: | Not determined. |
| Relative density: | Not determined. |
| Water solubility: | completely miscible |
| Partition coefficient (n-octanol/water): | Not determined. |
| Autoignition temperature: | Not determined. |
| Decomposition temperature: | Not determined. |
| Viscosity: | Not determined. |
| Explosive properties: | not hazardous |
| Oxidising properties: | None |

9.2. Other information

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|--|---------------------------|
| General Product Characteristics | No information available. |
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SECTION 10: Stability and reactivity

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| 10.1. Reactivity | No information available. |
| 10.2. Chemical stability | Stable under recommended storage conditions. |

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| 10.3. Possibility of hazardous reactions | No information available. |
| 10.4. Conditions to avoid | Not required. |
| 10.5. Incompatible materials | None. |
| 10.6. Hazardous decomposition products | None under normal use. |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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| Acute toxicity | No data is available on the product itself. Deionised water (CAS 7732-18-5) Oral LD50 Rat > 90 mL/kg (FOOD_JOURN) thiourea (CAS 62-56-6) LD50/oral 1750 mg/kg. (IUCLID) |
| Skin corrosion/irritation | Causes severe skin burns and eye damage. |
| Serious eye damage/eye irritation | Causes serious eye damage. |
| Respiratory / Skin Sensitisation | CAS 62-56-6: May cause sensitization of susceptible persons by skin contact. (Sittig, M. Handbook of Toxic and Hazardous Chemicals and Carcinogens, 1985. 2nd ed. Park Ridge, NJ: Noyes Data Corporation, 1985., p. 859) |
| Carcinogenicity | CAS 62-56-6: Possible human carcinogen. (DHHS/National Toxicology Program; Eleventh Report on Carcinogens: 1,2,3-Thiourea (62-56-6) (January 2005). |
| Germ cell mutagenicity | Based on available data, the classification criteria are not met. |
| Reproductive toxicity | Suspected of damaging fertility or the unborn child. |
| Specific target organ toxicity (single exposure) | No data available. |
| Specific target organ toxicity (repeated exposure) | No data available. |
| Aspiration hazard | No data available. |
| Human experience | No data available. |
| Information on likely routes of exposure | dermal |
| Symptoms related to the physical, chemical and toxicological characteristics | Suspect reproductive hazard - contains material which may injure unborn child. |

SECTION 12: Ecological information

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| 12.1. Toxicity | No data is available on the product itself. May change pH of waters. |
| thiourea; thiocarbamide (CAS 62-56-6) | |
| Ecotoxicity - Earthworm - Acute Toxicity Data | LC50 28 Days Eisenia foetida >1000 mg/kg [soil dry weight] (IUCLID) |
| Ecotoxicity - Freshwater Fish - Acute Toxicity Data | LC50 28 Days Eisenia foetida 3550 mg/kg [soil dry weight] (IUCLID) LC50 96 h Pimephales promelas >600 mg/L (IUCLID) |
| Ecotoxicity - Water Flea - Acute Toxicity Data | LC50 96 h Brachydanio rerio 10000 mg/L (IUCLID) EC50 48 h Daphnia magna 35 mg/L (IUCLID) |
| Ecotoxicity - Freshwater Algae - Acute Toxicity Data | EC50 96 h Desmodesmus subspicatus 6.8 mg/L (IUCLID) EC50 72 h Desmodesmus subspicatus 3.8 - 10 mg/L (IUCLID) |
| 12.2. Persistence and degradability | No data available. |
| 12.3. Bioaccumulative potential | No data available. |
| 12.4. Mobility in soil | No data available. |
| 12.5. Results of PBT and vPvB assessment | No information available. |
| 12.6. Other adverse effects | No information available. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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| Waste from residues / unused products | Dispose of in accordance with local regulations. |
| Contaminated packaging | Dispose of as unused product. |

SECTION 14: Transport information

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| ADR/RID | Not regulated. |
| IMDG | Not regulated. |
| IATA | Not regulated. |
| Further Information | Not classified as dangerous in the meaning of transport regulations. |

SECTION 15: Regulatory information

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

Regulatory Information

The product is classified and labelled in accordance with EC directives or respective national laws.

All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

The product is classified and labelled according to Regulation (EC) No. 1272/2008.

| Deionised water (CAS 7732-18-5) | |
|---|---|
| Inventory - United States - Section 8(b) Inventory (TSCA) | Present (ACTIVE) |
| U.S. - TSCA (Toxic Substances Control Act) - Section 8(a) - Chemical Data Reporting Rule - Fully Exempt Substances | Present (listed under Certain forms of natural gas and water) |
| thiourea; thiocarbamide (CAS 62-56-6) | |
| EU - REACH (1907/2006) - List of Registered Substances | Present |
| Inventory - United States - Section 8(b) Inventory (TSCA) | Present (ACTIVE) |
| U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities | 10 lb final RQ 4.54 kg final RQ |
| U.S. - CERCLA/SARA - Section 313 - Emission Reporting | 0.1 % de minimis concentration |
| U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261 | waste number U219 |
| U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics | waste number U219 |
| U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728) | Category IVb |
| U.S. - California - Proposition 65 - Carcinogens List | carcinogen, 1/1/1988 |
| U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL) | 10 µg/day NSRL |

15.2. Chemical safety assessment

Not required.

SECTION 16: Other information

Revision Note

Safety datasheet sections which have been updated: 2.

Key or legend to abbreviations and acronyms

CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS)

Key literature references and sources for data

Information taken from reference works and the literature. Sources of key data used to compile the Safety Data Sheet: IUCLID; Toxnet..

Classification procedure

Calculation method.

Full text of phrases referred to under sections 2 and 3

H302: Harmful if swallowed.
H351: Suspected of causing cancer.
H361d: Suspected of damaging the unborn child.
H411: Toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life with long lasting effects.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.

