

Safety Data Sheet

according to UK REACH Regulation

DW Therm (heat transfer fluid)

Revision date: 22.05.2023

Product code: 26

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

DW Therm (heat transfer fluid)

Further trade names

DW-Therm does not require a safety data sheet in accordance with Article 31 of REACH Regulation, the present information is for general information only.

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

Heat transfer fluid for industrial use with the Unistat in a hydraulically sealed system

1.3. Details of the supplier of the safety data sheet

| | | | |
|-----------------|---------------------------------|----------|---------------|
| Company name: | DWS Dr. Wilharm Synthesetechnik | | |
| Street: | Trentiner Ring 30 | | |
| Place: | D-86356 Neusaess | | |
| Telephone: | 0821 4504230 | Telefax: | 0821 45042317 |
| e-mail: | info@dws-synthese.de | | |
| Contact person: | Dr. Thomas Wilharm | | |
| Internet: | www.dws-synthese.de | | |

1.4. Emergency telephone number:

GIZ-Nord, Göttingen, Germany +49 551 19240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

This substance is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements**2.3. Other hazards**

No information available.

SECTION 3: Composition/information on ingredients**3.1. Substances****Hazardous components**

| CAS No | Chemical name | | | Quantity |
|--------|--------------------|----------|----------|----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| | Alkoxy Silanes | | | 99,9 % |
| | | | | |
| | | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Provide fresh air.

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After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

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

After ingestion

Let water be drunk in little sips (dilution effect).

Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

not known

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. not known

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on protection against fire and explosion

A static inert gas blanket can be used on the expansion vessel (s) of the Unistat. Above a working temperature of 170°C an inert gas blanket must be used.

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

Keep container tightly closed. Store in a dry place.

Hints on joint storage

not known

7.3. Specific end use(s)

Heat transfer fluid for industrial use with the Unistat in a hydraulically sealed system

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.2. Exposure controls****Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye/face protection.

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

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|-----------------|----------------|
| Physical state: | liquid |
| Colour: | colourless |
| Odour: | characteristic |

| | Test method |
|---|----------------------------------|
| pH-Value: | not determined |
| Changes in the physical state | |
| Melting point/freezing point: | -90 °C DIN 53736 |
| Boiling point or initial boiling point and boiling range: | 236 °C OECD 103 |
| Flash point: | 101 °C DIN EN ISO 2719 |
| Flammability | |
| Solid/liquid: | not applicable not applicable |
| Explosive properties | |
| The product is not: Explosive. | |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |

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Auto-ignition temperature: 265 °C 2

Decomposition temperature: not determined

Oxidizing properties

The product is not: oxidising.

Vapour pressure: not determined

Density (at 20 °C): 0,879 g/cm³ DIN 53420

Water solubility: The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined

Viscosity / kinematic:
(at 40 °C) 1,57 mm²/s DIN EN ISO 3104

Relative vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

conductivity : 0,003 µS/cm

SECTION 10: Stability and reactivity**10.2. Chemical stability**

Do not mix with acids.

10.3. Possibility of hazardous reactions

not known

10.4. Conditions to avoid

moisture.

10.5. Incompatible materials

Aluminium. non-ferrous metal

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicokinetics, metabolism and distribution**

not known

Acute toxicity

not known

Sensitising effects

not known

Further information

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information**12.1. Toxicity**

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

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12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

060899 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of silicon and silicon derivatives; wastes not otherwise specified

List of Wastes Code - used product

060899 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of silicon and silicon derivatives; wastes not otherwise specified

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)**14.1. UN number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)**14.1. UN number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

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Air transport (ICAO-TI/IATA-DGR)

| | |
|--|--|
| 14.1. UN number: | No dangerous good in sense of this transport regulation. |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. |

14.6. Special precautions for user

not known

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

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

Additional information

not relevant

National regulatory information

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

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
 IMDG: International Maritime Code for Dangerous Goods

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EmS: Emergency Schedules

MFAG: Medical First Aid Guide

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Further Information

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.