

# Safety Data Sheet

according to UK REACH Regulation

## DW-Therm HT (heat transfer fluid)

Revision date: 07.02.2023

Product code: 42

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

DW-Therm HT (heat transfer fluid)

CAS No: 63674-30-6

EC No: 400-370-7

#### 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

GIZ-Nord, Göttingen, Germany +49 551 19240

#### number:

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GB CLP Regulation

Aquatic Acute 1; H400

Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

##### GB CLP Regulation

Signal word: Warning

Pictograms:



##### Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

##### Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

##### Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Pictograms:



#### 2.3. Other hazards

No information available.

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**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
	1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin			99 %
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			

Full text of H and EUH 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		
		1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin	99 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg		

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

Provide fresh air.

**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**

Rinse mouth immediately and drink 1 glass of of water.

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

No information available.

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

Treat symptomatically.

**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. Move victim out of danger zone. None High power water jet.

**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**

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### General advice

The danger areas must be delimited and identified using relevant warning and safety signs.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

#### 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

Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray.

#### 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.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed.

#### Hints on joint storage

No special measures are necessary.

### 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.

#### 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.

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

Physical state: liquid  
 Colour: orange

**Test method**

pH-Value: not determined

**Changes in the physical state**

Melting point/freezing point: -34 °C DIN 51583  
 Boiling point or initial boiling point and boiling range: 353 °C ASTM D 1120  
 Flash point: 194 °C ASTM D 93

**Flammability**

Solid/liquid: not applicable  
 Gas: not applicable

**Explosive properties**

The product is not: Explosive.

Lower explosion limits: 0,39 vol. %  
 Upper explosion limits: 4,59 vol. %

Auto-ignition temperature: 385 °C ASTM E 659

**Self-ignition temperature**

Solid: not applicable  
 Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties**

Not oxidising.

Vapour pressure: not determined

Density: not determined

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 25 °C) 30,8 mm<sup>2</sup>/s DIN 51562

Relative vapour density: not determined

Evaporation rate: not determined

**9.2. Other information**

Solid content: not determined

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

Product is stable under standard conditions.

**10.3. Possibility of hazardous reactions**

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none Polymerization.

**10.4. Conditions to avoid**

Decomposition could be take place by higher temperatures.

**10.5. Incompatible materials**

HNBR seals are not resistant.

**10.6. Hazardous decomposition products**

Decomposition products depend upon temperatur, air supply and the presence of other substanes

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		

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

Very toxic to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
	1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin					
	Acute algae toxicity	ErC50 >0,07 mg/l	96 h	Pseudokirchneriella subcapitata		

**12.2. Persistence and degradability**

Not easily bio-degradable (according to OECD-criteria).

CAS No	Chemical name				
	Method	Value	d	Source	
	1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin				
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	6 %	28		
	OECD 302B / ISO 9888 / EEC 88/302 annex V, C.9	>40 %	28		

**12.3. Bioaccumulative potential**

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment cannot be ruled out.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
	1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin	5 - 7

**BCF**

CAS No	Chemical name	BCF	Species	Source
	1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin	>3000		

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**12.4. Mobility in soil**

This material is believed to be relatively immobile in soil

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

**12.6. 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.

**12.7. Other adverse effects**

No information available.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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

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

**List of Wastes Code - residues/unused products**

130308 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste insulating and heat transmission oils; synthetic insulating and heat transmission oils; hazardous waste

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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

UN 3082

**14.2. UN proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin)

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M6

Special Provisions:

274 335 375 601

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

90

Tunnel restriction code:

-

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

UN 3082

**14.2. UN proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin)

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**14.3. Transport hazard class(es):**

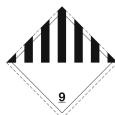
9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M6

Special Provisions:

274 335 375 601

Limited quantity:

5 L

Excepted quantity:

E1

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

UN 3082

**14.2. UN proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Special Provisions:

274, 335, 969

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-F

**Air transport (ICAO-TI/IATA-DGR)****14.1. UN number:**

UN 3082

**14.2. UN proper shipping name:**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin)**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Special Provisions:

A97 A158 A197

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y964

Excepted quantity:

E1

IATA-packing instructions - Passenger:

964

IATA-max. quantity - Passenger:

450 L

IATA-packing instructions - Cargo:

964

IATA-max. quantity - Cargo:

450 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS:

Yes



Danger releasing substance:

(1,2,3,4-Tetrahydro(1-phenylethyl)-naphthalin)

**14.6. Special precautions for user**

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No information available.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information****15.1. 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 2012/18/EU (SEVESO III): E1 Hazardous to the Aquatic Environment

**Additional information**

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 3 - highly hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

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

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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

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)



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intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

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 table at <http://abbrev.esdscom.eu>**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

**Relevant H and EUH statements (number and full text)**

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**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.