



according to 29 CFR 1910.1200(g)

### **DW-Therm HT, P20.340.32**

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 1 of 10

#### 1. Identification

#### **Product identifier**

DW-Therm HT, P20.340.32

## Recommended use of the chemical and restrictions on use

#### Use of the substance/mixture

Heat transfer fluid

#### Uses advised against

Any non-intended use.

#### Details of the supplier of the safety data sheet

Company name: Huber USA Inc.

Street: 1101 Nowell Rd Suite 110
Place: USA-NC 27607 Raleigh

Telephone: 800-726-4877

E-mail: info@huber-online.com Internet: www.huber-usa.com

Emergency phone number: Toll Free: 1-800-424-9300; Local: +1-703-527-3887

#### 2. Hazard(s) identification

#### Classification of the chemical

#### 29 CFR Part 1910.1200

This mixture is not classified as hazardous in accordance with Regulation 29 CFR 1910.1200(d).

#### Label elements

#### Hazards not otherwise classified

1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene: This substance is classified as PBT. PBT: Persistent, bio-cumulative, toxic

### 3. Composition/information on ingredients

### **Mixtures**

### Relevant ingredients

CAS No	Components	Quantity
6196-98-1	1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene	99 %

## 4. First-aid measures

## **Description of first aid measures**

#### **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

#### After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

## After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

### DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 2 of 10

#### After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

### Most important symptoms and effects, both acute and delayed

See sections 2 and 11

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### 5. Fire-fighting measures

#### **Extinguishing media**

## Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. Alcohol resistant foam. Atomized water.

#### Unsuitable extinguishing media

High power water jet.

#### Specific hazards arising from the chemical

Can be released in case of fire: Carbon monoxide (CO)., Carbon dioxide (CO2).

#### 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.

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

### 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

### General advice

See protective measures under point 7 and 8.

### For non-emergency personnel

Wear personal protection equipment (refer to section 8).

## For emergency responders

No special measures are necessary.

### **Environmental precautions**

Discharge into the environment must be avoided.

### Methods and material for containment and cleaning up

#### For containment

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

Treat the recovered material as prescribed in the section on waste disposal.

### For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 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

Wear suitable protective clothing. The expansion vessel (e) of the Unistat can be statically overlaid with inert gas. From a working temperature of 170°C, an inert gas blanket must be used in the expansion vessel.





according to 29 CFR 1910.1200(g)

### DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 3 of 10

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

## Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work.

#### Further information on handling

General protection and hygiene measures: See section 8.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

#### Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

#### Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.

Recommended storage temperature: 20 °C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

### 8. Exposure controls/personal protection

#### **Control parameters**

#### Additional advice on limit values

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

### **Exposure controls**

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection

Provide adequate ventilation.

## Individual protection measures, such as personal protective equipment

#### Eye/face protection

"Wear safety glasses; chemical goggles (if splashing is possible)." Standards: EN ISO 16321-1 or 29 CFR 1910.133

### Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of the glove material 0,4 mm

Breakthrough time >= 8 h

Butyl rubber. - Thickness of the glove material 0,5 mm

Breakthrough time >= 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of the glove material  $0.5\ \text{mm}$ 

Breakthrough time >= 8 h

NBR (Nitrile rubber). - Thickness of the glove material 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of the glove material 0,5 mm

Breakthrough time >= 8 h

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.

The selected protective gloves should satisfy the specifications of standards like EN 374.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

### DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 4 of 10

#### Skin protection

Suitable protective clothing: Lab apron.

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Exceeding exposure limit values

Suitable respiratory protective equipment: half-mask with filter EN 149 or 29 CFR 1910.134.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

### **Environmental exposure controls**

No special precautionary measures are necessary.

#### 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state: liquid
Color: orange
Odor: characteristic

Test method

Melting point/freezing point:
- 34 °C DIN 51583

Boiling point or initial boiling point and
353 °C ASTM D 1120

boiling range:

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

Flash point: 194 °C ASTM D 93

Auto-ignition temperature: 385 °C
Decomposition temperature: not determined
pH-Value: not determined

Viscosity / kinematic: 30,8 mm²/s DIN 51562

(at 25 °C)

Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapor pressure:

Density:

Relative vapour density:

SECTION 12: Ecological information not determined not determined not determined not determined

### Other information

### Information with regard to physical hazard classes

Explosive properties

none

Sustaining combustion: Not sustaining combustion

Self-ignition temperature

Gas: not determined

Oxidizing properties

none

#### Other safety characteristics

Evaporation rate: not determined Solvent separation test: not determined Solvent content: not determined Solid content: not determined not determined solid content:



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

#### DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 5 of 10

Sublimation point:

Softening point:

Pour point:

Viscosity / dynamic:

Flow time:

not determined
not determined
not determined
not determined
not determined
not determined

### 10. Stability and reactivity

#### Reactivity

No information available.

#### **Chemical stability**

Stability: Stable

The product is chemically stable under recommended conditions of storage, use and temperature.

### Possibility of hazardous reactions

Hazardous reactions: Will not occur

No information available.

## **Conditions to avoid**

Protect against: UV-radiation/sunlight. heat.

#### Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

### **Hazardous decomposition products**

Can be released in case of fire: Carbon monoxide, Carbon dioxide (CO2).

### 11. Toxicological information

## Route(s) of Entry

Ingestion: May be harmful if swallowed. Inhalation: May be harmful if inhaled. Skin contact: May cause irritation. Eye contact: May cause irritation.

## Information on toxicological effects

#### Toxicocinetics, 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

### 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.

#### 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.

#### Specific target organ toxicity (STOT) - single exposure

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

#### Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (OSHA): No ingredient of this mixture is listed.



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**DW-Therm HT, P20.340.32** 

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 6 of 10

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

**Aspiration hazard** 

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

Specific effects in experiment on an animal

No data available.

#### Information on other hazards

#### **Endocrine disrupting properties**

No data available.

#### 12. Ecological information

#### **Ecotoxicity**

The product has not been tested.

#### Persistence and degradability

The product has not been tested.

#### **Bioaccumulative potential**

No indication of bioaccumulation potential.

#### Mobility in soil

No data available.

#### **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.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

## Other adverse effects

No data available.

## **Further information**

Do not allow to enter into surface water or drains.

## 13. Disposal considerations

### Waste treatment methods

#### **Disposal recommendations**

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

#### Contaminated packaging

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

## 14. Transport information

## U.S. DOT 49 CFR 172.101

UN 3082

<u>Proper shipping name:</u> ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene)

Transport hazard class(es):

Packing group:
Hazard label:



9 III



according to 29 CFR 1910.1200(g)

DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 7 of 10

Marine transport (IMDG)

UN number or ID number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene)

Transport hazard class(es):9Packing group:IIIHazard label:9

Marine pollutant: YES

Special Provisions: 274 335 969

Limited quantity: 5 L

Excepted quantity: E1

EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene)

Transport hazard class(es): 9
Packing group: III
Hazard label: 9



Special Provisions: A97 A158 A197 A215

Limited quantity Passenger: 30 kg G
Passenger LQ: Y964
Excepted quantity: E1

IATA-packing instructions - Passenger:964IATA-max. quantity - Passenger:450 LIATA-packing instructions - Cargo:964IATA-max. quantity - Cargo:450 L

**Environmental hazards** 

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: 1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene

**Special precautions for user** 

See section 8.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant

### 15. Regulatory information

#### **U.S. Regulations**

## **National Inventory TSCA**

1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene (CAS: 6196-98-1): listed in the TSCA inventory 8 (b): (x) active, not listed under TSCA 12(b)

## State Regulations





according to 29 CFR 1910.1200(g)

## DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 8 of 10

### Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

This preparation is hazardous in the sense of regulation 29 CFR Part 1910.1200.

### 16. Other information

## **Hazardous Materials Identification System (HMIS)**

Health: 0
Flammability: 1
Physical Hazard: 0
Personal Protection: -

#### **NFPA Hazard Ratings**

Health: 0
Flammability: 1
Reactivity: 0
Unique Hazard: -

## Changes

Revision date: 11/27/2024

Revision No: 1,0

Rev. 1,0; Initial release: 26.11.2024







according to 29 CFR 1910.1200(g)

#### DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 9 of 10

#### Abbreviations and acronyms

ACGIH:American Conference of Governmental Industrial Hygienists

ASTM: American Society for Testing and Materials.

ATE: acute toxicity estimate BCF: Bio concentration factor ECHA: European Chemicals Agency CAS: Chemical Abstracts Service CFR: Code of Federal Regulations DOT: Department of Transportation

d: days

EC50: Half maximal effective concentration

EN: European Norm

EPA: Environmental Protection Agency

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

h: hours

HMIS: Hazardous Materials Identification System

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IBC: Intermediate Bulk Container

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent MARPOL: marine pollution

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect concentration

NTP: National Toxicology Program

N/A: not applicable

NFPA: National Fire Protection Association

**UN: United Nations** 

OECD: Organisation for Economic Co-operation and Development

OSHA: Occupational Safety and Health Administration

PBT: Persistent bioaccumulative toxic

RTECS: Registry of Toxic Effects of Chemical Substances

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

SARA: Superfund Amendments and Reauthorization Act

STEL: short-term exposure limits TSCA: Toxic Substances Control Act TWA: time weighted average VOC: Volatile Organic Compounds

#### Other data

Classification according 29 CFR Part 1910.1200: - Classification procedure:

Health hazards: Calculation method. Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

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





according to 29 CFR 1910.1200(g)

DW-Therm HT, P20.340.32

Revision date: 11/27/2024 Product code: DW-ThermHT\_US Page 10 of 10

processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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