



## **Thermoplan Descaler**

### **Safety Data Sheet**

*Thermoplan AG | [www.thermoplan.ch](http://www.thermoplan.ch)*

*Thermoplan-Platz 1*

*CH-6353 Weggis*

*Tel. +41 41 392 12 00*

*Fax. +41 41 392 12 01*



# Thermoplan Descaler

## Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758.

Issue date: 7/7/2021 Revision date: 7/7/2021 Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Thermoplan Descaler

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use  
Use of the substance/mixture : For research purpose only

##### 1.2.2. Uses advised against

No additional information available

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

##### Manufacturer

Urnex Brands, LLC  
700 Executive Blvd.  
Elmsford, NY 10523 - USA  
T +1-914-963-2042 - F +1-914-963-2145  
[info@urnex.com](mailto:info@urnex.com)

##### Distributor

Thermoplan AG  
Thermoplan-Platz 1  
6353 Weggis  
Tel: +41.41.392.12.00

#### 1.4. Emergency telephone number

Emergency number : International (Infotrac): +1 (352) 323-3500

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

Full text of hazard classes, H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning  
Hazard statements (CLP) : H319 - Causes serious eye irritation.  
Precautionary statements (CLP) : P280 - Wear eye protection / face protection.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

#### 2.3. Other hazards

No additional information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name              | Product identifier     | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-------------------|------------------------|---------|---|
| Organic Acid Salt | (CAS-No.) Trade Secret | 20 – 30 | Acute Tox. 4 (Oral), H302<br>Eye Irrit. 2, H319                 |

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- |                                       |  |
|---------------------------------------|--|
| First-aid measures after inhalation   | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.                           |
| First-aid measures after skin contact | : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.  |
| First-aid measures after eye contact  | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.              |

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

- |                                     |   |
|-------------------------------------|---|
| Symptoms/effects after inhalation   | : May cause irritation to the respiratory tract.  |
| Symptoms/effects after skin contact | : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.  |
| Symptoms/effects after eye contact  | : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. |
| Symptoms/effects after ingestion    | : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.  |

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

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- |                                |   |
|--------------------------------|---|
| Suitable extinguishing media   | : Use extinguishing media appropriate for surrounding fire. |
| Unsuitable extinguishing media | : None known.   |

#### 5.2. Special hazards arising from the substance or mixture

- |             |   |
|-------------|---|
| Fire hazard | : Products of combustion may include, and are not limited to: oxides of carbon. Oxides of nitrogen. |
|-------------|---|

#### 5.3. Advice for firefighters

- |                                |  |
|--------------------------------|--|
| Protection during firefighting | : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). |
|--------------------------------|--|

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- |                  |  |
|------------------|--|
| General measures | : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. |
|------------------|--|

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

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

- |                         |   |
|-------------------------|---|
| For containment         | : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment. |
| Methods for cleaning up | : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.  |

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- |                               |   |
|-------------------------------|---|
| Precautions for safe handling | : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. |
| Hygiene measures              | : Wash contaminated clothing before reuse. Always wash hands after handling the product.  |

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

- |                    |   |
|--------------------|---|
| Storage conditions | : Keep out of the reach of children. Store tightly closed in a dry, cool and well-ventilated place. |
|--------------------|---|

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### 7.3. Specific end use(s)

For research purpose only

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.

#### Hand protection:

Wear suitable gloves

#### Eye protection:

Safety eyewear complying with an approved standard such as the European Standard EN166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Thermal hazard protection:

Use personal protective equipment as required.

#### Environmental exposure controls:

Avoid release to the environment.

#### Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                               |
|---|-------------------------------|
| Physical state                                  | : Liquid                      |
| Appearance                                      | : Red Liquid                  |
| Colour  | : Red                         |
| Odour   | : None                        |
| Odour threshold                                 | : No data available           |
| pH  | : 1.16 (Acid Reserve = 5.3 g) |
| Relative evaporation rate (butylacetate=1)      | : No data available           |
| Melting point                                   | : No data available           |
| Freezing point                                  | : No data available           |
| Boiling point                                   | : No data available           |
| Flash point                                     | : No data available           |
| Auto-ignition temperature                       | : No data available           |
| Decomposition temperature                       | : No data available           |
| Flammability (solid, gas)                       | : Not flammable               |
| Vapour pressure                                 | : No data available           |
| Relative vapour density at 20 °C                | : No data available           |
| Relative density                                | : No data available           |
| Density   | : 1.038 – 1.105 g/ml (Bulk)   |
| Solubility                                      | : Soluble in water            |
| Partition coefficient n-octanol/water           | : No data available           |
| Partition coefficient n-octanol/water (Log Kow) | : Not applicable              |
| Viscosity, kinematic                            | : No data available           |
| Viscosity, dynamic                              | : No data available           |
| Explosive properties                            | : No data available           |
| Oxidising properties                            | : No data available           |

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Explosive limits : No data available

### 9.2. Other information

No additional information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Heat. Incompatible materials.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Oxides of nitrogen.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.  
Acute toxicity (dermal) : Not classified.  
Acute toxicity (inhalation) : Not classified.

|                |               |
|----------------|---------------|
| ATE CLP (oral) | 5175.19 mg/kg |
|----------------|---------------|

#### Organic Acid Salt (Trade Secret)

|                    |            |
|--------------------|------------|
| LD50 oral rat      | 1350 mg/kg |
| LD50 dermal rabbit | 3698       |

Skin corrosion/irritation : Not classified.

pH: 1.16 (Acid Reserve = 5.3 g)

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

Serious eye damage/irritation : Causes serious eye irritation.

pH: 1.16 (Acid Reserve = 5.3 g)

Respiratory or skin sensitisation : Not classified.

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

Germ cell mutagenicity : Not classified.

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

Carcinogenicity : Not classified.

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

Reproductive toxicity : Not classified.

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

STOT-single exposure : Not classified.

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

STOT-repeated exposure : Not classified.

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

Aspiration hazard : Not classified.

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

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Not classified.

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### 12.2. Persistence and degradability

| Thermoplan Descaler           |                  |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

### 12.3. Bioaccumulative potential

| Thermoplan Descaler                             |                  |
|---|------------------|
| Partition coefficient n-octanol/water (Log Kow) | Not applicable   |
| Bioaccumulative potential                       | Not established. |

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information : No other effects known

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. The generation of waste should be avoided or minimized wherever possible. Recycle empty containers where allowed.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number

UN-No. (ADR) : Not regulated  
UN-No. (IMDG) : Not regulated  
UN-No. (IATA) : Not regulated  
UN-No. (ADN) : Not regulated  
UN-No. (RID) : Not regulated

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated  
Proper Shipping Name (IMDG) : Not regulated  
Proper Shipping Name (IATA) : Not regulated  
Proper Shipping Name (ADN) : Not regulated  
Proper Shipping Name (RID) : Not regulated

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : Not regulated

#### IMDG

Transport hazard class(es) (IMDG) : Not regulated

#### IATA

Transport hazard class(es) (IATA) : Not regulated

#### ADN

Transport hazard class(es) (ADN) : Not regulated

#### RID

Transport hazard class(es) (RID) : Not regulated

### 14.4. Packing group

Packing group (ADR) : Not regulated  
Packing group (IMDG) : Not regulated  
Packing group (IATA) : Not regulated  
Packing group (ADN) : Not regulated  
Packing group (RID) : Not regulated

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### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available.

### 14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

#### - Overland transport

Not regulated

#### - Transport by sea

Not regulated

#### - Air transport

Not regulated

#### - Inland waterway transport

Not regulated

#### - Rail transport

Not regulated

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance.

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

Not determined

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

None.

Abbreviations and acronyms:

|  |
|--|
| °C – Degrees Celsius   |
| °F – Degrees Fahrenheit  |
| ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road.                   |
| ACGIH – American Conference of Governmental Industrial Hygienists  |
| ATE – Acute Toxicity Estimate  |
| BCF – Bioconcentration Factor  |
| BEI – Biological Exposure Index  |
| CAS – Chemical Abstracts Service   |
| CLP – Regulation (EC) No 1272/2008 on the Classification, Labeling and Packaging of substances and mixtures. |
| CMR – Carcinogen, Mutagen, Reproductive toxin  |
| cP – centipoise (unit of dynamic viscosity)  |
| cSt – centistokes (unit of kinematic viscosity)  |
| DNEL – Derived No-effect Level   |
| DMEL – Derived Minimal Effect Level  |
| EC50 – Half maximal effective concentration  |

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ECHA – European Chemicals Agency  
EC-No. – European Community number  
EU – European Union  
GHS – Globally Harmonized System of Classification and Labelling of Chemicals  
h – Hours  
IATA – International Air Transport Association  
IC50 – Inhibition concentration  
IDLH – Immediately Dangerous to Life or Health  
IMDG – International Maritime Dangerous Goods  
IOELV – Indicative Occupational Exposure Limit Value  
KIFS – Swedish Chemicals Agency's (KemI's) Code of Statutes  
kPa – kilopascal  
Koc – Adsorption Coefficient  
Kow – Octanol-Water Partition Coefficient  
LC50 – Median Lethal Concentration  
LD50 – Median Lethal Dose  
LOAEL – Lowest Observed Adverse Effect level  
mg/l – Milligram per liter  
mg/kg – Milligram per kilogram  
mg/m<sup>3</sup> – Milligram per cubic meter  
Min – Minutes  
NIOSH – National Institute for Occupational Safety and Health  
NOEC – No Observed Effect Concentration  
NO(A)EL – No Observed (Adverse) Effect Level  
N.O.S. – Not Otherwise Specified  
OEL – Occupational Exposure Limit  
PBT - Persistent, Bioaccumulative and Toxic  
PCN – Poison Centre Notification  
PNEC – Predicted No Effect Concentration  
ppm – Parts per million  
PVC – Polyvinyl chloride  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
RID – European Agreement concerning the International Carriage of Dangerous Goods by Rail  
SDS – Safety Data Sheet  
STEL – Short Term Exposure Limit  
STOT – Specific Target Organ Toxicity  
SVHC – Substance of Very High Concern (CMR, vPvB, PBT)  
TDI – Tolerable Daily Intake  
TLV – Threshold Limit Value  
TWA – Time Weighted Average  
UFI – Unique Formulation Identifier  
UN – United Nations  
vPvB - Very Persistent and Very Bioaccumulative  
WEL – Workplace Exposure Limit  
WGK – Wassergefährdungskategorie – German water quality classification

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4             |
| Eye Irrit. 2        | Serious eye damage/eye irritation, Category 2 |
| H302                | Harmful if swallowed.                         |
| H319                | Causes serious eye irritation.                |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

|              |      |                  |
|--------------|------|------------------|
| Eye Irrit. 2 | H319 | Expert judgement |
|--------------|------|------------------|

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