



## HP-99

Version number: 2.0  
Replaces version of: 2024-05-03 (1)

Revision: 2025-05-22

## 1 Identification

## 1.1 Product identifier

Trade name

HP-99

Alternative name(s)

One Shot High pH Presoak

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

Relevant identified uses

cleaning agent

Uses advised against

Do not use for products which come into direct contact with the skin.

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

Transchem Inc.  
1225 Franklin Blvd.  
Cambridge Ontario N1R 7E5  
CanadaTelephone: +1.800.265.9100  
e-mail: info@transchem.com  
Website: https://transchem.com/

e-mail (competent person)

kberzitis@transchem.com (Karl Berzitis)

## 1.4 Emergency telephone number

Emergency information service

INFOTRAC 1-800-535-5053, 24 Hours

## 2 Hazard identification

## 2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class                                                                    | Category | Hazard class and category | Hazard statement |
|---------|---------------------------------------------------------------------------------|----------|---------------------------|------------------|
| 3.2     | skin corrosion/irritation                                                       | 1        | Skin Corr. 1              | H314             |
| 3.3     | serious eye damage/eye irritation                                               | 1        | Eye Dam. 1                | H318             |
| 3.8R    | specific target organ toxicity - single exposure (respiratory tract irritation) | 3        | STOT SE 3                 | H335             |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

## 2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS05, GHS07





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## - Hazard statements

- H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

## - Precautionary statements

- P260 Do not breathe mist, vapours or spray.  
P264 Wash hands and face thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves, protective clothing, eye protection and face protection.  
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 or shower.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor.  
P363 Wash contaminated clothing before reuse.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

## 2.3 Other hazards

## Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0.1\%$ .

## Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

## 3 Composition/ Information on ingredients

## 3.1 Substances

Not relevant (mixture)

## 3.2 Mixtures

## Description of the mixture

| Name of substance                                  | Other names or synonyms                                                                        | Identifier           | Wt%      | Classification acc. to GHS                                                                                                           |
|----------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------|
| 2-aminoethanol                                     | ethanolamine                                                                                   | CAS No<br>141-43-5   | 5 – < 10 | Flam. Liq. 4 / H227<br>Acute Tox. 4 / H302<br>Acute Tox. 4 / H312<br>Acute Tox. 4 / H332<br>Skin Corr. 1B / H314<br>STOT SE 3 / H335 |
| SODIUM XYLENE SULPHONATE                           | sodium (xylenes and 4-ethylbenzene)sulfonates<br>Sodium (xylenes and 4-ethylbenzene)sulfonates | CAS No<br>1300-72-7  | 5 – < 10 | Eye Irrit. 2 / H319                                                                                                                  |
| Dodecylbenzenesulphonic acid                       | Dodecylbenzenesulfonic acid                                                                    | CAS No<br>27176-87-0 | 5 – < 10 | Acute Tox. 4 / H302<br>Skin Corr. 1B / H314<br>Eye Dam. 1 / H318                                                                     |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | tetrasodium 2-[bis(carboxylatomethyl)amino]pentanedioate                                       | CAS No<br>51981-21-6 | 1 – < 5  | Acute Tox. 4 / H332                                                                                                                  |
| potassium hydroxide                                | caustic potash                                                                                 | CAS No<br>1310-58-3  | 1 – < 5  | Acute Tox. 4 / H302<br>Skin Corr. 1A / H314<br>Eye Dam. 1 / H318                                                                     |



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| Name of substance                                  | Other names or synonyms                                  | Identifier           | Wt%     | Classification acc. to GHS                                                           |
|----------------------------------------------------|----------------------------------------------------------|----------------------|---------|--------------------------------------------------------------------------------------|
| D-Glucopyranose, oligomers, decyl octyl glycosides |                                                          | CAS No<br>68515-73-1 | 1 – < 5 | Eye Dam. 1 / H318                                                                    |
| sodium hydroxide                                   | caustic soda                                             | CAS No<br>1310-73-2  | 1 – < 5 | Acute Tox. 4 / H302<br>Skin Corr. 1A / H314<br>Eye Dam. 1 / H318                     |
| sodium silicate                                    | Silicic acid, sodium salt<br>sodium hydroxy(oxo)silicate | CAS No<br>1344-09-8  | 1 – < 5 | Acute Tox. 3 / H331<br>Skin Irrit. 2 / H315<br>Eye Dam. 1 / H318<br>STOT SE 3 / H335 |

**Remarks**

The specific chemical identity and/or exact percentage of composition (concentration) has been withheld as a trade secret. For full text of abbreviations: see SECTION 16.

**4 First-aid measures****4.1 Description of first-aid measures****General notes**

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

**Following inhalation**

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

**Following skin contact**

Wash with plenty of soap and water.

**Following eye contact**

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

**Following ingestion**

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Impairment of vision. Production of tissue damage in the eye. Conjunctivitis (pink eye). Localized redness, edema, pruritis and/or pain.

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

Rinse immediately carefully and thoroughly with eye shower or water. Treat symptomatically.

**5 Fire-fighting measures****5.1 Extinguishing media**

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media

Water jet

**5.2 Special hazards arising from the substance or mixture**

Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do



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not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately.  
Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Chemical protective clothing, Eye and face protection, Wear self-contained breathing apparatus

## 6 Accidental release measures

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

For non-emergency personnel

Remove persons to safety. Prevent skin contact. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

Advice on how to contain a spill

Set up barriers, Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## 7 Handling and storage

### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas. Never add water to this product.

- Handling of incompatible substances or mixtures

Do not mix with acids.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

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

- Incompatible substances or mixtures

Acids, Oxidizers

Control of the effects

Protect against external exposure, such as

frost

- General rule

Keep out of reach of children. Store in a dry place. Store in a closed container. Store in a well-ventilated place. Keep



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away from incompatible materials.

## - Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

## 7.3 Specific end use(s)

See section 16 for a general overview.

## 8 Exposure controls/ Personal protection

## 8.1 Control parameters

| Occupational exposure limit values (Workplace Exposure Limits) |                               |           |              |           |                          |            |                           |                 |                                |          |                 |
|----------------------------------------------------------------|-------------------------------|-----------|--------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|----------|-----------------|
| Country                                                        | Name of agent                 | CAS No    | Identifier   | TWA [ppm] | TWA [mg/m <sup>3</sup> ] | STEL [ppm] | STEL [mg/m <sup>3</sup> ] | Ceiling-C [ppm] | Ceiling-C [mg/m <sup>3</sup> ] | Notation | Source          |
| CA                                                             | potassium hydroxide           | 1310-58-3 | OEL (AB)     |           |                          |            |                           |                 | 2                              |          | OHS Code        |
| CA                                                             | potassium hydroxide           | 1310-58-3 | OEL (BC)     |           |                          |            |                           |                 | 2                              |          | "BC Regulation" |
| CA                                                             | potassium hydroxide           | 1310-58-3 | OEL (ON-MoL) |           |                          |            |                           |                 | 2                              |          | MoL             |
| CA                                                             | potassium hydroxide           | 1310-58-3 | PEV/VE A     |           |                          |            |                           | 2               |                                |          | Regulation OHS  |
| CA                                                             | sodium hydroxide              | 1310-73-2 | OEL (AB)     |           |                          |            |                           |                 | 2                              |          | OHS Code        |
| CA                                                             | sodium hydroxide              | 1310-73-2 | OEL (BC)     |           |                          |            |                           |                 | 2                              |          | "BC Regulation" |
| CA                                                             | sodium hydroxide              | 1310-73-2 | OEL (ON-MoL) |           |                          |            |                           | 2               |                                |          | MoL             |
| CA                                                             | sodium hydroxide              | 1310-73-2 | PEV/VE A     |           |                          |            |                           |                 | 2                              |          | Regulation OHS  |
| CA                                                             | 2-aminoethanol                | 141-43-5  | PEV/VE A     | 3         | 7.5                      | 6          | 15                        |                 |                                |          | Regulation OHS  |
| CA                                                             | 2-aminoethanol (ethanolamine) | 141-43-5  | OEL (AB)     | 3         | 7.5                      | 6          | 15                        |                 |                                |          | OHS Code        |
| CA                                                             | ethanolamine                  | 141-43-5  | OEL (BC)     | 3         |                          | 6          |                           |                 |                                |          | "BC Regulation" |
| CA                                                             | ethanolamine                  | 141-43-5  | OEL (ON-MoL) | 3         |                          | 6          |                           |                 |                                |          | MoL             |

Notation

|           |                                                                                                                                                                          |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ceiling-C | ceiling value is a limit value above which exposure should not occur                                                                                                     |
| STEL      | short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)                   |
| TWA       | time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) |



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## Relevant DNELs of components

| Name of substance                                   | CAS No     | Endpoint | Threshold level        | Protection goal, route of exposure | Used in           | Exposure time              |
|-----------------------------------------------------|------------|----------|------------------------|------------------------------------|-------------------|----------------------------|
| 2-aminoethanol                                      | 141-43-5   | DNEL     | 1 mg/m <sup>3</sup>    | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| 2-aminoethanol                                      | 141-43-5   | DNEL     | 0.51 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | chronic - local effects    |
| 2-aminoethanol                                      | 141-43-5   | DNEL     | 3 mg/kg bw/day         | human, dermal                      | worker (industry) | chronic - systemic effects |
| SODIUM XYLENE SULPHONATE                            | 1300-72-7  | DNEL     | 26.9 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| SODIUM XYLENE SULPHONATE                            | 1300-72-7  | DNEL     | 136.3 mg/kg bw/day     | human, dermal                      | worker (industry) | chronic - systemic effects |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | DNEL     | 52 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | DNEL     | 52 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | acute - systemic effects   |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | DNEL     | 52 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | chronic - local effects    |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | DNEL     | 52 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | acute - local effects      |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | DNEL     | 57.2 mg/kg bw/day      | human, dermal                      | worker (industry) | chronic - systemic effects |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | DNEL     | 80 mg/kg bw/day        | human, dermal                      | worker (industry) | acute - systemic effects   |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 | DNEL     | 7.3 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 | DNEL     | 15,000 mg/kg bw/day    | human, dermal                      | worker (industry) | chronic - systemic effects |
| potassium hydroxide                                 | 1310-58-3  | DNEL     | 1 mg/m <sup>3</sup>    | human, inhalatory                  | worker (industry) | chronic - local effects    |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | DNEL     | 420 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | DNEL     | 595,000 mg/kg bw/day   | human, dermal                      | worker (industry) | chronic - systemic effects |

## Relevant PNECs of components

| Name of substance | CAS No   | Endpoint | Threshold level | Organism          | Environmental compartment    | Exposure time                |
|-------------------|----------|----------|-----------------|-------------------|------------------------------|------------------------------|
| 2-aminoethanol    | 141-43-5 | PNEC     | 0.07 mg/l       | aquatic organisms | freshwater                   | short-term (single instance) |
| 2-aminoethanol    | 141-43-5 | PNEC     | 0.007 mg/l      | aquatic organisms | marine water                 | short-term (single instance) |
| 2-aminoethanol    | 141-43-5 | PNEC     | 100 mg/l        | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 2-aminoethanol    | 141-43-5 | PNEC     | 0.357 mg/kg     | aquatic organisms | freshwater sediment          | short-term (single instance) |



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| Relevant PNECs of components                        |            |          |                 |                       |                              |                              |
|-----------------------------------------------------|------------|----------|-----------------|-----------------------|------------------------------|------------------------------|
| Name of substance                                   | CAS No     | Endpoint | Threshold level | Organism              | Environmental compartment    | Exposure time                |
| 2-aminoethanol                                      | 141-43-5   | PNEC     | 0.036 mg/kg     | aquatic organisms     | marine sediment              | short-term (single instance) |
| 2-aminoethanol                                      | 141-43-5   | PNEC     | 1.29 mg/kg      | terrestrial organisms | soil                         | short-term (single instance) |
| SODIUM XYLENE SULPHONATE                            | 1300-72-7  | PNEC     | 0.023 mg/l      | aquatic organisms     | marine water                 | short-term (single instance) |
| SODIUM XYLENE SULPHONATE                            | 1300-72-7  | PNEC     | 2.3 mg/l        | aquatic organisms     | water                        | intermittent release         |
| SODIUM XYLENE SULPHONATE                            | 1300-72-7  | PNEC     | 0.23 mg/l       | aquatic organisms     | freshwater                   | short-term (single instance) |
| SODIUM XYLENE SULPHONATE                            | 1300-72-7  | PNEC     | 100 mg/l        | aquatic organisms     | sewage treatment plant (STP) | short-term (single instance) |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | PNEC     | 0.892 mg/l      | aquatic organisms     | freshwater                   | short-term (single instance) |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | PNEC     | 1 mg/l          | aquatic organisms     | marine water                 | short-term (single instance) |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | PNEC     | 50 mg/l         | aquatic organisms     | sewage treatment plant (STP) | short-term (single instance) |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | PNEC     | 27.5 mg/kg      | aquatic organisms     | freshwater sediment          | short-term (single instance) |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | PNEC     | 2.75 mg/kg      | aquatic organisms     | marine sediment              | short-term (single instance) |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | PNEC     | 25 mg/kg        | terrestrial organisms | soil                         | short-term (single instance) |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 | PNEC     | 9.45 mg/l       | aquatic organisms     | freshwater                   | short-term (single instance) |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 | PNEC     | 0.945 mg/l      | aquatic organisms     | marine water                 | short-term (single instance) |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 | PNEC     | 41.2 mg/l       | aquatic organisms     | sewage treatment plant (STP) | short-term (single instance) |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 | PNEC     | 0.5 mg/kg       | terrestrial organisms | soil                         | short-term (single instance) |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | PNEC     | 0.176 mg/l      | aquatic organisms     | freshwater                   | short-term (single instance) |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | PNEC     | 0.018 mg/l      | aquatic organisms     | marine water                 | short-term (single instance) |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | PNEC     | 560 mg/l        | aquatic organisms     | sewage treatment plant (STP) | short-term (single instance) |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | PNEC     | 1.516 mg/kg     | aquatic organisms     | freshwater sediment          | short-term (single instance) |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | PNEC     | 0.152 mg/kg     | aquatic organisms     | marine sediment              | short-term (single instance) |



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| Relevant PNECs of components                       |            |          |                 |                       |                           |                              |
|----------------------------------------------------|------------|----------|-----------------|-----------------------|---------------------------|------------------------------|
| Name of substance                                  | CAS No     | Endpoint | Threshold level | Organism              | Environmental compartment | Exposure time                |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | PNEC     | 0.654 mg/kg     | terrestrial organisms | soil                      | short-term (single instance) |

## 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. Use protective eyewear to guard against splash of liquids.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Body protection

Protective clothing against liquid chemicals.

Respiratory protection

Full face mask/half mask/quarter mask (EN 136/140). Type : B (against inorganic gases and vapors, color code: Grey).

Environmental exposure controls

Avoid release to the environment. Keep away from drains, surface and ground water.

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                                          |                   |
|----------------------------------------------------------|-------------------|
| Physical state                                           | liquid            |
| Color                                                    | clear - violet    |
| Odor                                                     | characteristic    |
| Odor threshold                                           | no data available |
| Melting point/freezing point                             | not determined    |
| Boiling point or initial boiling point and boiling range | not determined    |
| Evaporation rate                                         | not determined    |
| Flammability                                             | non-combustible   |
| Lower and upper explosion limit                          | not determined    |
| Flash point                                              | not determined    |





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|                           |                    |
|---------------------------|--------------------|
| Auto-ignition temperature | not determined     |
| Decomposition temperature | not relevant       |
| pH (value)                | >13 (23 °C) (base) |
| Kinematic viscosity       | not determined     |
| Solubility(ies)           | not determined     |

## Partition coefficient

|                                                   |                                   |
|---------------------------------------------------|-----------------------------------|
| Partition coefficient n-octanol/water (log value) | this information is not available |
|---------------------------------------------------|-----------------------------------|

|                |                |
|----------------|----------------|
| Vapor pressure | not determined |
|----------------|----------------|

## Density and/or relative density

|                         |                                               |
|-------------------------|-----------------------------------------------|
| Density                 | not determined                                |
| Relative vapour density | information on this property is not available |
| Relative density        | 1.17 (water = 1)                              |

|                          |                       |
|--------------------------|-----------------------|
| Particle characteristics | not relevant (liquid) |
|--------------------------|-----------------------|

## 9.2 Other information

|                                                    |                                                                |
|----------------------------------------------------|----------------------------------------------------------------|
| Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards):<br>not relevant |
| Other safety characteristics                       | there is no additional information                             |

## 10 Stability and reactivity

## 10.1 Reactivity

This material is not reactive under normal ambient conditions. Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

## 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. See below "Conditions to avoid".

## 10.3 Possibility of hazardous reactions

No known hazardous reactions.

## 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

## 10.5 Incompatible materials

Acids, Oxidizers

Release of flammable materials with:

Light metals (due to the release of hydrogen in an acid/alkaline medium)



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## 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## 11 Toxicological information

## 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

## Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## Classification acc. to GHS

## Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if swallowed.

## Acute toxicity estimate (ATE) of components

| Name of substance                                  | CAS No     | Exposure route        | ATE           |
|----------------------------------------------------|------------|-----------------------|---------------|
| 2-aminoethanol                                     | 141-43-5   | oral                  | 1,089 mg/kg   |
| 2-aminoethanol                                     | 141-43-5   | inhalation: vapour    | 11 mg/l/4h    |
| Dodecylbenzenesulphonic acid                       | 27176-87-0 | oral                  | 650 mg/kg     |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | 51981-21-6 | inhalation: dust/mist | >4.2 mg/l/4h  |
| potassium hydroxide                                | 1310-58-3  | oral                  | 333 mg/kg     |
| sodium hydroxide                                   | 1310-73-2  | oral                  | 325 mg/kg     |
| sodium silicate                                    | 1344-09-8  | inhalation: vapour    | >2.06 mg/l/4h |
| sodium silicate                                    | 1344-09-8  | inhalation: dust/mist | >0.5 mg/l/4h  |

## Acute toxicity of components

| Name of substance                                  | CAS No     | Exposure route        | Endpoint | Value        | Species |
|----------------------------------------------------|------------|-----------------------|----------|--------------|---------|
| 2-aminoethanol                                     | 141-43-5   | oral                  | LD50     | 1,089 mg/kg  | rat     |
| 2-aminoethanol                                     | 141-43-5   | dermal                | LD50     | 2,504 mg/kg  | rabbit  |
| SODIUM XYLENE SULPHONATE                           | 1300-72-7  | oral                  | LD50     | >5,000 mg/kg | rat     |
| Dodecylbenzenesulphonic acid                       | 27176-87-0 | oral                  | LD50     | 650 mg/kg    | rat     |
| Dodecylbenzenesulphonic acid                       | 27176-87-0 | dermal                | LD50     | >2,000 mg/kg | rat     |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | 51981-21-6 | oral                  | LD50     | >2,000 mg/kg | rat     |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | 51981-21-6 | inhalation: dust/mist | LC50     | >4.2 mg/l/4h | rat     |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | 51981-21-6 | dermal                | LD50     | >2,000 mg/kg | rat     |
| potassium hydroxide                                | 1310-58-3  | oral                  | LD50     | 333 mg/kg    | rat     |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | oral                  | LD50     | >2,000 mg/kg | rat     |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | dermal                | LD50     | >2,000 mg/kg | rabbit  |
| sodium hydroxide                                   | 1310-73-2  | oral                  | LD50     | 325 mg/kg    | rabbit  |



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| Acute toxicity of components |           |                     |          |               |         |
|------------------------------|-----------|---------------------|----------|---------------|---------|
| Name of substance            | CAS No    | Exposure route      | Endpoint | Value         | Species |
| sodium silicate              | 1344-09-8 | oral                | LD50     | 3,400 mg/kg   | rat     |
| sodium silicate              | 1344-09-8 | inhalation: va-pour | LC50     | >2.06 mg/l/4h | rat     |
| sodium silicate              | 1344-09-8 | dermal              | LD50     | >5,000 mg/kg  | rat     |

**Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Respiratory or skin sensitization**

Shall not be classified as a respiratory or skin sensitizer.

**Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

**Carcinogenicity**

Shall not be classified as carcinogenic.

**Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

**Specific target organ toxicity - single exposure**

May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

**Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

**Information on likely routes of exposure**

If on skin, If inhaled, If in eyes

**Symptoms related to the physical, chemical and toxicological characteristics****If swallowed:**

Diarrhoea, Vomiting, Abdominal pain

**If in eyes:**

Causes tears, Production of tissue damage in the eye, Conjunctivitis (pink eye), Risk of blindness

**If inhaled:**

Localized redness, edema, pruritis and/or pain, Cough, Headache

**If on skin:**

Localized redness, edema, pruritis and/or pain

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Irritation and significant inflammation of the skin (dermatitis) due to the defatting properties of the product may be caused by repeated or prolonged exposure.

## 12 Ecological information

### 12.1 Toxicity

Harmful to aquatic life.



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## Aquatic toxicity (acute) of components

| Name of substance                                  | CAS No     | Endpoint | Value       | Species               | Exposure time |
|----------------------------------------------------|------------|----------|-------------|-----------------------|---------------|
| 2-aminoethanol                                     | 141-43-5   | LC50     | 349 mg/l    | fish                  | 96 h          |
| 2-aminoethanol                                     | 141-43-5   | EC50     | 27.04 mg/l  | aquatic invertebrates | 48 h          |
| 2-aminoethanol                                     | 141-43-5   | ErC50    | 2.8 mg/l    | algae                 | 72 h          |
| Dodecylbenzenesulphonic acid                       | 27176-87-0 | LC50     | 3.2 mg/l    | fish                  | 96 h          |
| Dodecylbenzenesulphonic acid                       | 27176-87-0 | EC50     | 12 mg/l     | aquatic invertebrates | 24 h          |
| Dodecylbenzenesulphonic acid                       | 27176-87-0 | ErC50    | 29 mg/l     | algae                 | 96 h          |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | 51981-21-6 | LC50     | >100 mg/l   | fish                  | 96 h          |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | 51981-21-6 | EC50     | >100 mg/l   | aquatic invertebrates | 48 h          |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | LC50     | 100.8 mg/l  | fish                  | 96 h          |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | EC50     | >100 mg/l   | aquatic invertebrates | 48 h          |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | ErC50    | 27.22 mg/l  | algae                 | 72 h          |
| sodium hydroxide                                   | 1310-73-2  | LC50     | <180 mg/l   | fish                  | 96 h          |
| sodium hydroxide                                   | 1310-73-2  | EC50     | 40.4 mg/l   | aquatic invertebrates | 48 h          |
| sodium silicate                                    | 1344-09-8  | LC50     | 310 mg/l    | fish                  | 96 h          |
| sodium silicate                                    | 1344-09-8  | EC50     | 1,700 mg/l  | aquatic invertebrates | 48 h          |
| sodium silicate                                    | 1344-09-8  | ErC50    | >345.4 mg/l | algae                 | 72 h          |

## Aquatic toxicity (chronic) of components

| Name of substance                                  | CAS No     | Endpoint | Value      | Species               | Exposure time |
|----------------------------------------------------|------------|----------|------------|-----------------------|---------------|
| 2-aminoethanol                                     | 141-43-5   | EC50     | 2.5 mg/l   | aquatic invertebrates | 21 d          |
| Dodecylbenzenesulphonic acid                       | 27176-87-0 | EC50     | 723 mg/l   | microorganisms        | 3 h           |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate | 51981-21-6 | EC50     | 396.2 mg/l | aquatic invertebrates | 21 d          |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | LC50     | 3.2 mg/l   | fish                  | 28 d          |
| D-Glucopyranose, oligomers, decyl octyl glycosides | 68515-73-1 | EC50     | >560 mg/l  | microorganisms        | 6 h           |
| sodium hydroxide                                   | 1310-73-2  | EC50     | 22 mg/l    | microorganisms        | 15 min        |



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## 12.2 Persistence and degradability

## Biodegradation

The surfactant contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents.

| Degradability of components                         |            |                  |                  |      |        |        |
|-----------------------------------------------------|------------|------------------|------------------|------|--------|--------|
| Name of sub-stance                                  | CAS No     | Process          | Degradation rate | Time | Method | Source |
| 2-aminoethanol                                      | 141-43-5   | DOC removal      | >90 %            | 21 d |        | ECHA   |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 | oxygen depletion | 76 %             | 28 d |        | ECHA   |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 | DOC removal      | 100 %            | 28 d |        | ECHA   |

## 12.3 Bioaccumulative potential

Data are not available.

| Bioaccumulative potential of components             |            |     |                             |          |
|-----------------------------------------------------|------------|-----|-----------------------------|----------|
| Name of substance                                   | CAS No     | BCF | Log KOW                     | BOD5/COD |
| 2-aminoethanol                                      | 141-43-5   | 2.5 | -2.3 (25 °C)                |          |
| Dodecylbenzenesulphonic acid                        | 27176-87-0 | 96  | 4.78 (pH value: 7, 25 °C)   |          |
| Tetrasodium N,N-bis(carboxylato-methyl)-L-glutamate | 51981-21-6 |     | <0 (pH value: 7, 27 °C)     |          |
| D-Glucopyranose, oligomers, decyl octyl glycosides  | 68515-73-1 |     | 1.72 (pH value: 6.5, 40 °C) |          |

## 12.4 Mobility in soil

Data are not available.

## 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0.1\%$ .

## 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

## 12.7 Other adverse effects

Data are not available.

## 13 Disposal considerations

## 13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

## Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

## Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

## Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be



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handled separately by the local or national waste management facilities.

## 14 Transport information

## 14.1 UN number

|           |         |
|-----------|---------|
| UN RTDG   | UN 3266 |
| IMDG-Code | UN 3266 |
| ICAO-TI   | UN 3266 |

## 14.2 UN proper shipping name

|                                        |                                            |
|----------------------------------------|--------------------------------------------|
| UN RTDG                                | CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. |
| IMDG-Code                              | CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. |
| ICAO-TI                                | Corrosive liquid, basic, inorganic, n.o.s. |
| Technical name (hazardous ingredients) | sodium hydroxide, potassium hydroxide      |

## 14.3 Transport hazard class(es)

|           |   |
|-----------|---|
| UN RTDG   | 8 |
| IMDG-Code | 8 |
| ICAO-TI   | 8 |

## 14.4 Packing group

|           |     |
|-----------|-----|
| UN RTDG   | III |
| IMDG-Code | III |
| ICAO-TI   | III |

## 14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

## 14.6 Special precautions for user

There is no additional information.

## 14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations**Transport information - National regulations - Additional information (UN RTDG)**

|                 |      |
|-----------------|------|
| UN number       | 3266 |
| Class           | 8    |
| Packing group   | III  |
| Danger label(s) | 8    |



|                          |                    |
|--------------------------|--------------------|
| Special provisions (SP)  | 223, 274 (UN RTDG) |
| Excepted quantities (EQ) | E1 (UN RTDG)       |
| Limited quantities (LQ)  | 5 L (UN RTDG)      |

**International Maritime Dangerous Goods Code (IMDG) - Additional information**

|                  |   |
|------------------|---|
| Marine pollutant | - |
|------------------|---|



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Danger label(s) 8



Special provisions (SP) 223, 274

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

EmS F-A, S-B

Stowage category A

Segregation group 18 - Alkalies

**International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**

Danger label(s) 8



Special provisions (SP) A3

Excepted quantities (EQ) E1

Limited quantities (LQ) 1 L

**15 Regulatory information****15.1 Safety, health and environmental regulations specific for the product in question****National regulations (United States)****Toxic Substance Control Act (TSCA)**

all ingredients are listed (ACTIVE) or exempt from listing

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

| Name of substance            | CAS No     | Remarks | Statutory code | Final RQ pounds (Kg) |
|------------------------------|------------|---------|----------------|----------------------|
| potassium hydroxide          | 1310-58-3  |         | 1              | 1000 (454)           |
| sodium hydroxide             | 1310-73-2  |         | 1              | 1000 (454)           |
| Dodecylbenzenesulphonic acid | 27176-87-0 |         | 1              | 1000 (454)           |

Legend

1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

**Right to Know Hazardous Substance List**

- Cleaning Product Right to Know Act Substance List (CA-RTK)

| Name of substance | CAS No    | Functionality | Authoritative Lists |
|-------------------|-----------|---------------|---------------------|
| sodium hydroxide  | 1310-73-2 |               | OEHHA RELs          |

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**- Toxic or Hazardous Substance List (MA-TURA)**

| Name of substance            | CAS No     | DEP CODE | PBT / HHS / LHS | PBT / HHS Threshold | De Minimis Concentration Threshold |
|------------------------------|------------|----------|-----------------|---------------------|------------------------------------|
| potassium hydroxide          | 1310-58-3  |          |                 |                     | 1.0 %                              |
| sodium hydroxide             | 1310-73-2  |          |                 |                     | 1.0 %                              |
| Dodecylbenzenesulphonic acid | 27176-87-0 |          |                 |                     | 1.0 %                              |

**- Hazardous Substances List (MN-ERTK)**

| Name of substance   | CAS No    | References | Remarks |
|---------------------|-----------|------------|---------|
| 2-aminoethanol      | 141-43-5  | A          |         |
| potassium hydroxide | 1310-58-3 | A          |         |
| sodium hydroxide    | 1310-73-2 | A, N, O    |         |

**Legend**

- A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
- N National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer
- O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

**- Hazardous Substance List (NJ-RTK)**

| Name of substance            | CAS No     | Remarks | Classifications |
|------------------------------|------------|---------|-----------------|
| 2-aminoethanol               | 141-43-5   |         | CO<br>F2        |
| potassium hydroxide          | 1310-58-3  |         | CO<br>R1        |
| sodium hydroxide             | 1310-73-2  |         | CO<br>R1        |
| Dodecylbenzenesulphonic acid | 27176-87-0 |         | CO              |

**Legend**

- CO Corrosive
- F2 Flammable - Second Degree
- R1 Reactive - First Degree

**- Hazardous Substance List (Chapter 323) (PA-RTK)**

| Name acc. to inventory         | CAS No     | Classification |
|--------------------------------|------------|----------------|
| ETHANOL, 2-AMINO-              | 141-43-5   |                |
| POTASSIUM HYDROXIDE (K(OH))    | 1310-58-3  | E              |
| SODIUM HYDROXIDE (NA(OH))      | 1310-73-2  | E              |
| BENZENESULFONIC ACID, DODECYL- | 27176-87-0 | E              |

**Legend**

- E Environmental hazard





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## - Hazardous Substance List (RI-RTK)

| Name of substance   | CAS No    | References |
|---------------------|-----------|------------|
| 2-aminoethanol      | 141-43-5  | T, F       |
| 2-aminoethanol      | 141-43-5  | T, F       |
| 2-aminoethanol      | 141-43-5  | T, F       |
| potassium hydroxide | 1310-58-3 | T, F       |
| potassium hydroxide | 1310-58-3 | T, F       |
| potassium hydroxide | 1310-58-3 | T, F       |
| sodium hydroxide    | 1310-73-2 | T, F       |
| sodium hydroxide    | 1310-73-2 | T, F       |
| sodium hydroxide    | 1310-73-2 | T, F       |

## Legend

F Flammability (NFPA®)  
T Toxicity (ACGIH®)

## California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

| Proposition 65 List of chemicals                     |           |             |                      |
|------------------------------------------------------|-----------|-------------|----------------------|
| Name acc. to inventory                               | CAS No    | Conc.       | Type of the toxicity |
| Strong inorganic acid mists containing sulfuric acid |           | 0.0966 wt%  | cancer               |
| diethanolamine                                       | 111-42-2  | 0.01562 wt% | cancer               |
| sulfur dioxide                                       | 7446-09-5 | 0.00643 wt% | developmental        |

## Industry or sector specific available guidance(s)

## NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category            | Rating | Description                                                                                                                                                |
|---------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chronic             | /      | none                                                                                                                                                       |
| Health              | 3      | major injury likely unless prompt action is taken and medical treatment is given                                                                           |
| Flammability        | 0      | material that will not burn under typical fire conditions                                                                                                  |
| Physical hazard     | 0      | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | -      |                                                                                                                                                            |

## NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category     | Degree of hazard | Description                                                                      |
|--------------|------------------|----------------------------------------------------------------------------------|
| Flammability | 0                | material that will not burn under typical fire conditions                        |
| Health       | 3                | material that, under emergency conditions, can cause serious or permanent injury |
| Instability  | 0                | material that is normally stable, even under fire conditions                     |



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| Category       | Degree of hazard | Description |
|----------------|------------------|-------------|
| Special hazard |                  |             |

**National regulations (Canada)**

## Domestic Substances List (DSL)

All ingredients are listed.

**National inventories**

| Country | Inventory  | Status                                            |
|---------|------------|---------------------------------------------------|
| CA      | DSL        | all ingredients are listed                        |
| EU      | REACH Reg. | all ingredients are listed or exempt from listing |
| US      | TSCA       | all ingredients are listed (ACTIVE)               |

Legend

DSL Domestic Substances List (DSL)

REACH Reg. REACH registered substances

TSCA Toxic Substance Control Act

**15.2 Chemical Safety Assessment**

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

**16 Other information****Indication of changes (revised safety data sheet)**

Revision. 2025-05-22.

| Section | Former entry (text/value)                                                                                                                                                                                 | Actual entry (text/value)                                                                                                            | Safety-relevant |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 3.2     |                                                                                                                                                                                                           | Description of the mixture:<br>change in the listing (table)                                                                         | yes             |
| 7.2     |                                                                                                                                                                                                           | Control of the effects                                                                                                               | yes             |
| 7.2     |                                                                                                                                                                                                           | Protect against external exposure, such as:<br>frost                                                                                 | yes             |
| 10.5    |                                                                                                                                                                                                           | Release of flammable materials with:<br>Light metals (due to the release of hydrogen in an<br>acid/alkaline medium)                  | yes             |
| 11.1    | Acute toxicity:<br>Shall not be classified as acutely toxic.GHS of the<br>United Nations, annex 4: May be harmful if swal-<br>lowed or if inhaled.                                                        | Acute toxicity:<br>Shall not be classified as acutely toxic.GHS of the<br>United Nations, annex 4: May be harmful if swal-<br>lowed. | yes             |
| 11.1    |                                                                                                                                                                                                           | Acute toxicity estimate (ATE) of components:<br>change in the listing (table)                                                        | yes             |
| 11.1    |                                                                                                                                                                                                           | Acute toxicity of components:<br>change in the listing (table)                                                                       | yes             |
| 12.1    |                                                                                                                                                                                                           | Aquatic toxicity (acute) of components:<br>change in the listing (table)                                                             | yes             |
| 12.5    | Results of PBT and vPvB assessment:<br>According to the results of its assessment, this<br>substance is not a PBT or a vPvB. Does not con-<br>tain a PBT-/vPvB-substance at a concentration of<br>≥ 0.1%. | Results of PBT and vPvB assessment:<br>Does not contain a PBT-/vPvB-substance at a con-<br>centration of ≥ 0.1%.                     | yes             |
| 15.1    |                                                                                                                                                                                                           | Toxic Substance Control Act (TSCA):                                                                                                  | yes             |

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| Section | Former entry (text/value)                                                           | Actual entry (text/value)                                                                                                  | Safety-relevant |
|---------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------|
|         |                                                                                     | all ingredients are listed (ACTIVE) or exempt from listing                                                                 |                 |
| 15.1    |                                                                                     | List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4): change in the listing (table) | yes             |
| 15.1    |                                                                                     | Toxic or Hazardous Substance List (MA-TURA): change in the listing (table)                                                 | yes             |
| 15.1    |                                                                                     | Hazardous Substance List (NJ-RTK): change in the listing (table)                                                           | yes             |
| 15.1    |                                                                                     | Hazardous Substance List (Chapter 323) (PA-RTK): change in the listing (table)                                             | yes             |
| 15.1    |                                                                                     | Proposition 65 List of chemicals: change in the listing (table)                                                            | yes             |
| 15.1    |                                                                                     | NPCA-HMIS® III: change in the listing (table)                                                                              | yes             |
| 15.1    |                                                                                     | National regulations (Canada)                                                                                              | yes             |
| 15.1    |                                                                                     | Domestic Substances List (DSL): All ingredients are listed.                                                                | yes             |
| 16      | Indication of changes (revised safety data sheet): Date of compilation. 2024-05-03. | Indication of changes (revised safety data sheet): Revision. 2025-05-22.                                                   | yes             |

**Abbreviations and acronyms**

| Abbr.           | Descriptions of used abbreviations                                                                                                                                               |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| "BC Regulation" | OHS Regulation: Section 5.48 (British Columbia)                                                                                                                                  |
| ACGIH®          | American Conference of Governmental Industrial Hygienists                                                                                                                        |
| Acute Tox.      | Acute toxicity                                                                                                                                                                   |
| ATE             | Acute Toxicity Estimate                                                                                                                                                          |
| BCF             | Bioconcentration factor                                                                                                                                                          |
| BOD             | Biochemical Oxygen Demand                                                                                                                                                        |
| CAS             | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)                                                                           |
| Ceiling-C       | Ceiling value                                                                                                                                                                    |
| COD             | Chemical oxygen demand                                                                                                                                                           |
| DEP CODE        | Department of Environmental Protection Code                                                                                                                                      |
| DGR             | Dangerous Goods Regulations (see IATA/DGR)                                                                                                                                       |
| DNEL            | Derived No-Effect Level                                                                                                                                                          |
| EC50            | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| ED              | Endocrine disruptor                                                                                                                                                              |
| EmS             | Emergency Schedule                                                                                                                                                               |
| ErC50           | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control           |
| Eye Dam.        | Seriously damaging to the eye                                                                                                                                                    |
| Eye Irrit.      | Irritant to the eye                                                                                                                                                              |
| Flam. Liq.      | Flammable liquid                                                                                                                                                                 |

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| Abbr.          | Descriptions of used abbreviations                                                                                                                |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| GHS            | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations                                         |
| HHS            | Higher hazard substance                                                                                                                           |
| IATA           | International Air Transport Association                                                                                                           |
| IATA/DGR       | Dangerous Goods Regulations (DGR) for the air transport (IATA)                                                                                    |
| ICAO           | International Civil Aviation Organization                                                                                                         |
| ICAO-TI        | Technical instructions for the safe transport of dangerous goods by air                                                                           |
| IMDG           | International Maritime Dangerous Goods Code                                                                                                       |
| IMDG-Code      | International Maritime Dangerous Goods Code                                                                                                       |
| LC50           | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| LD50           | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval                  |
| LHS            | Lower hazard substance                                                                                                                            |
| log KOW        | n-Octanol/water                                                                                                                                   |
| MoL            | Ministry of Labor: Current Occupational Exposure Limits for Ontario Workplaces Required under Regulation 833                                      |
| NFPA®          | National Fire Protection Association (United States)                                                                                              |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition                                     |
| OHS Code       | Occupational Health and Safety Code: Occupational exposure limits for chemical substances (Alberta)                                               |
| PBT            | Persistent, Bioaccumulative and Toxic                                                                                                             |
| PNEC           | Predicted No-Effect Concentration                                                                                                                 |
| ppm            | Parts per million                                                                                                                                 |
| Regulation OHS | Regulation respecting occupational health and safety: Permissible exposure values for airborne contaminants (Quebec)                              |
| RTECS          | Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)                                               |
| Skin Corr.     | Corrosive to skin                                                                                                                                 |
| Skin Irrit.    | Irritant to skin                                                                                                                                  |
| STEL           | Short-term exposure limit                                                                                                                         |
| STOT SE        | Specific target organ toxicity - single exposure                                                                                                  |
| TWA            | Time-weighted average                                                                                                                             |
| UN RTDG        | UN Recommendations on the Transport of Dangerous Good                                                                                             |
| vPvB           | Very Persistent and very Bioaccumulative                                                                                                          |

**Key literature references and sources for data**

Hazardous Products Regulations (HPR)  
SOR/2022-272: Regulations Amending the Hazardous Products Regulations (GHS, Seventh Revised Edition)  
UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG).  
Dangerous Goods Regulations (DGR) for the air transport (IATA).

**Classification procedure**

Physical and chemical properties: The classification is based on tested mixture.  
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).



# HP-99

Version number: 2.0  
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Revision: 2025-05-22

## List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text                                     |
|------|------------------------------------------|
| H227 | Combustible liquid.                      |
| H302 | Harmful if swallowed.                    |
| H312 | Harmful in contact with skin.            |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation.                  |
| H318 | Causes serious eye damage.               |
| H319 | Causes serious eye irritation.           |
| H331 | Toxic if inhaled.                        |
| H332 | Harmful if inhaled.                      |
| H335 | May cause respiratory irritation.        |

## Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.