

## Hounö Protect Detergent

Revision: 2022-12-09

Version: 02.2

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

#### 1.1 Product identifier

**Trade name:** Hounö Protect Detergent

UFI: 7TK2-202K-T00K-5MTG

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

<b>Product use:</b>	Oven/Grill cleaner. For professional use only.
<b>Uses advised against:</b>	Uses other than those identified are not recommended.

#### SWED - Sector-specific worker exposure description :

AISE\_SWED\_PW\_8a\_1  
AISE\_SWED\_PW\_1\_1  
AISE\_SWED\_PW\_4\_1

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

Hounö A/S

#### Contact details

Alsvej 1, 8900 Randers, Danmark  
Tlf: +45 87 77 47 11  
E-mail: houno@houno.com

#### 1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).

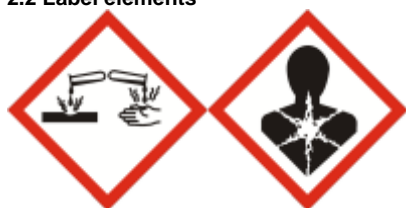
This International SDS is for information only. It does not meet all applicable regulatory requirements and does not replace the relevant statutory data sheet for your country.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

STOT RE 2 (H373)  
Skin Irrit. 2 (H315)  
Eye Dam. 1 (H318)

#### 2.2 Label elements



**Signal word:** Danger.

Contains tetrasodium ethylene diamine tetraacetate (Tetrasodium EDTA), disodium disilicate (Disodium Disilicate)

#### Hazard statements:

H315 - Causes skin irritation.  
H318 - Causes serious eye damage.  
H373 - May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements:

P280 - Wear eye or face protection.  
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 CENTRE, doctor or physician.

#### 2.3 Other hazards

No other hazards known.

## Hounö Protect Detergent

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
tetrasodium ethylene diamine tetraacetate	200-573-9	64-02-8	01-2119486762-27	Acute Tox. 4 (H302) Acute Tox. 4 (H332) STOT RE 2 (H373) Eye Dam. 1 (H318)		20-30
disodium disilicate	215-687-4	1344-09-8	[1]	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		10-20
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		1-3

**Specific concentration limits**

sodium hydroxide:

- Eye Dam. 1 (H318) >= 3% > Eye Irrit. 2 (H319) >= 0.5%
- Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

**SECTION 4: First aid measures****4.1 Description of first aid measures****General Information:**

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Get medical attention or advice if you feel unwell.

**Inhalation:**

Get medical attention or advice if you feel unwell.

**Skin contact:**

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

**Eye contact:**

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

**Ingestion:**

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

**Self-protection of first aider:**

Consider personal protective equipment as indicated in subsection 8.2.

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

No known effects or symptoms in normal use.

**Skin contact:**

Causes irritation.

**Eye contact:**

Causes severe or permanent damage.

**Ingestion:**

No known effects or symptoms in normal use.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

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

No special hazards known.

**5.3 Advice for firefighters**

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Wear eye/face protection. Repeated or prolonged contact: Wear suitable gloves.

**6.2 Environmental precautions**

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water.

## Hounö Protect Detergent

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

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

**6.4 Reference to other sections**

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Measures to prevent fire and explosions:**

No special precautions required.

**Measures required to protect the environment:**

For environmental exposure controls see subsection 8.2.

**Advices on general occupational hygiene:**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

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

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

**7.3 Specific end use(s)**

No specific advice for end use available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Workplace exposure limits**

Air limit values, if available:

Biological limit values, if available:

**Recommended monitoring procedures, if available:****Additional exposure limits under the conditions of use, if available:****DNEL/DMEL and PNEC values****Human exposure**

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
tetrasodium ethylene diamine tetraacetate	-	-	-	25
disodium disilicate	-	-	-	0.8
sodium hydroxide	-	-	-	-

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
tetrasodium ethylene diamine tetraacetate	-	-	-	-
disodium disilicate	No data available	-	No data available	1.59
sodium hydroxide	2 %	-	-	-

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
tetrasodium ethylene diamine tetraacetate	-	-	-	-
disodium disilicate	No data available	-	No data available	0.8
sodium hydroxide	2 %	-	-	-

DNEL/DMEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
tetrasodium ethylene diamine tetraacetate	3	3	1.5	1.5

## Hounö Protect Detergent

disodium disilicate	-	-	-	5.61
sodium hydroxide	-	-	1	-

DNEL/DMEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
tetrasodium ethylene diamine tetraacetate	1.2	1.2	0.6	-
disodium disilicate	-	-	-	1.38
sodium hydroxide	-	-	1	-

## Environmental exposure

## Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
tetrasodium ethylene diamine tetraacetate	2.2	0.22	1.2	43
disodium disilicate	7.5	1	7.5	348
sodium hydroxide	-	-	-	-

## Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
tetrasodium ethylene diamine tetraacetate	-	-	0.72	-
disodium disilicate	-	-	-	-
sodium hydroxide	-	-	-	-

## 8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

**Appropriate engineering controls:** If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

## REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a

## Personal protective equipment

## Eye / face protection:

Safety glasses or goggles (EN 166).

## Hand protection:

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary. Repeated or prolonged contact: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature. Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm  
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm

## Body protection:

No special requirements under normal use conditions.

## Respiratory protection:

No special requirements under normal use conditions.

**Environmental exposure controls:** No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

**Recommended maximum concentration (% w/w):** 0.5

**Appropriate engineering controls:** No special requirements under normal use conditions.

**Appropriate organisational controls:** No special requirements under normal use conditions.

## REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC

## Hounö Protect Detergent

Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

**Personal protective equipment**

**Eye / face protection:** No special requirements under normal use conditions.  
**Hand protection:** No special requirements under normal use conditions.  
**Body protection:** No special requirements under normal use conditions.  
**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** No special requirements under normal use conditions.

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

Information in this section refers to the product, unless it is specifically stated that substance data is listed

**Physical state:** Liquid

**Colour:** Clear , Colourless

**Odour:** Product specific

**Odour threshold:** Not applicable

**Melting point/freezing point (°C):** Not determined

**Initial boiling point and boiling range (°C):** Not determined

**Method / remark**

Not relevant to classification of this product  
See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
tetrasodium ethylene diamine tetraacetate	No data available	Non-experimental data	
disodium disilicate	> 100	Method not given	
sodium hydroxide	> 990	Method not given	

**Method / remark**

**Flammability (solid, gas):** Not applicable to liquids

**Flammability (liquid):** Not flammable.

**Flash point (°C):** Not applicable.

**Sustained combustion:** Not applicable.

( UN Manual of Tests and Criteria, section 32, L.2 )

**Lower and upper explosion limit/flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not applicable.

**pH:** >= 11.5 (neat)

**Kinematic viscosity:** Not determined

**Solubility in / Miscibility with water:** Fully miscible

ISO 4316

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
tetrasodium ethylene diamine tetraacetate	500	Method not given	20
disodium disilicate	Soluble	Method not given	20
sodium hydroxide	1000	Method not given	20

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

**Method / remark**

**Vapour pressure:** Not determined

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
tetrasodium ethylene diamine tetraacetate	0.0000000002	Read across	25
disodium disilicate	No data available		
sodium hydroxide	< 1330	Method not given	20

**Method / remark**

**Relative density:** ≈ 1.30 (20 °C)

**Relative vapour density:** -

**Particle characteristics:** No data available.

OECD 109 (EU A.3)  
Not relevant to classification of this product  
Not applicable to liquids.

**9.2 Other information****9.2.1 Information with regard to physical hazard classes****Explosive properties:** Not explosive.**Oxidising properties:** Not oxidising.**Corrosion to metals:** Not corrosive**9.2.2 Other safety characteristics**

No other relevant information available.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

**10.2 Chemical stability**

Stable under normal storage and use conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known under normal storage and use conditions.

**10.4 Conditions to avoid**

None known under normal storage and use conditions.

**10.5 Incompatible materials**

None known under normal use conditions.

**10.6 Hazardous decomposition products**

None known under normal storage and use conditions.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

Mixture data:.

**Relevant calculated ATE(s):**

ATE - Oral (mg/kg): &gt;2000

ATE - Inhalatory, mists (mg/l): &gt;5

**Skin irritation and corrosivity****Result:** Not corrosive to skin      **Method:** Epiderm

Substance data, where relevant and available, are listed below:.

**Acute toxicity**

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
tetrasodium ethylene diamine tetraacetate	LD <sub>50</sub>	1780	Rat	OECD 401 (EU B.1)		2200
disodium disilicate	LD <sub>50</sub>	3400	Rat	Method not given		Not established
sodium hydroxide		No data available				Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
tetrasodium ethylene diamine tetraacetate	LD <sub>50</sub>	> 5000	Rabbit	Method not given		Not established
disodium disilicate	LD <sub>50</sub>	> 5000	Rat	Method not given		Not established
sodium hydroxide	LD <sub>50</sub>	1350	Rabbit	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	LC <sub>50</sub>	≥ 1-5 (dust)	Rat	OECD 403 (EU B.2)	6
disodium disilicate	LC <sub>50</sub>	> 2.06 No mortality observed	Rat	Non guideline test	
sodium hydroxide		No data			

		available		
--	--	-----------	--	--

## Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
tetrasodium ethylene diamine tetraacetate	Not established	2.7	Not established	Not established
disodium disilicate	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established

## Irritation and corrosivity

## Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	Not irritant	Rabbit	OECD 404 (EU B.4)	
disodium disilicate	Irritant		Method not given	
sodium hydroxide	Corrosive	Rabbit	Method not given	

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	Severe damage		Method not given	
disodium disilicate	Severe damage		Method not given	
sodium hydroxide	Corrosive	Rabbit	Method not given	

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
disodium disilicate	Irritating to respiratory tract		Method not given	
sodium hydroxide	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
disodium disilicate	Not sensitising		Method not given	
sodium hydroxide	Not sensitising		Human repeated patch test	

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
disodium disilicate	No data available			
sodium hydroxide	No data available			

## CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

## Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
tetrasodium ethylene diamine tetraacetate	No evidence for mutagenicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
disodium disilicate	No evidence for mutagenicity, negative test results		No data available	
sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)

## Carcinogenicity

Ingredient(s)	Effect
tetrasodium ethylene diamine tetraacetate	No evidence for carcinogenicity, weight-of-evidence
disodium disilicate	No evidence for carcinogenicity, negative test results
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence

## Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
tetrasodium ethylene diamine tetraacetate			No data available				No evidence for reproductive toxicity
disodium disilicate			No data available				No evidence for reproductive toxicity

## Hounö Protect Detergent

sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
------------------	--	--	-------------------	--	--	--	---

**Repeated dose toxicity**

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
tetrasodium ethylene diamine tetraacetate		No data available				
disodium disilicate	NOAEL	> 159	Rat	Method not given	180	No effects observed
sodium hydroxide		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
tetrasodium ethylene diamine tetraacetate		No data available				
disodium disilicate		No data available				
sodium hydroxide		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
tetrasodium ethylene diamine tetraacetate		No data available				
disodium disilicate		No data available				
sodium hydroxide		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
tetrasodium ethylene diamine tetraacetate			No data available					
disodium disilicate			No data available					
sodium hydroxide			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
tetrasodium ethylene diamine tetraacetate	No data available
disodium disilicate	No data available
sodium hydroxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
tetrasodium ethylene diamine tetraacetate	Respiratory tract
disodium disilicate	Not applicable
sodium hydroxide	No data available

**Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3.

**Potential adverse health effects and symptoms**

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

**11.2 Information on other hazards****11.2.1 Endocrine disrupting properties**

Endocrine disrupting properties - Human data, if available:

**11.2.2 Other information**

No other relevant information available.

**SECTION 12: Ecological information**



## Hounö Protect Detergent

## 12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

## Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	LC <sub>50</sub>	> 100	<i>Lepomis macrochirus</i>	OPP 72-1, static (EPA)	96
disodium disilicate	LC <sub>50</sub>	1108	<i>Brachydanio rerio</i>	Method not given	96
sodium hydroxide	LC <sub>50</sub>	35	Various species	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC <sub>50</sub>	140	<i>Daphnia magna Straus</i>	DIN 38412, Part 11	48
disodium disilicate	EC <sub>50</sub>	1700	<i>Daphnia magna Straus</i>	Method not given	48
sodium hydroxide	EC <sub>50</sub>	40.4	<i>Ceriodaphnia sp.</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC <sub>50</sub>	> 100	<i>Scenedesmus obliquus</i>	88/302/EEC, Part C, static	72
disodium disilicate	EC <sub>50</sub>	207	<i>Desmodesmus subspicatus</i>	Method not given	72
sodium hydroxide	EC <sub>50</sub>	22	<i>Photobacterium phosphoreum</i>	Method not given	0.25

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
tetrasodium ethylene diamine tetraacetate		No data available			
disodium disilicate		No data available			
sodium hydroxide		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	EC <sub>20</sub>	> 500	Activated sludge	OECD 209	0.5 hour(s)
disodium disilicate		No data available			
sodium hydroxide		No data available			

## Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	> 25.7	<i>Brachydanio rerio</i>	OECD 210	35 day(s)	
disodium disilicate	NOEC	348	<i>Brachydanio rerio</i>	Method not given	96 hour(s)	
sodium hydroxide		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	25	<i>Daphnia magna</i>	OECD 211	21 day(s)	
disodium disilicate		No data available				

## Hounö Protect Detergent

sodium hydroxide		No data available				
------------------	--	-------------------	--	--	--	--

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
tetrasodium ethylene diamine tetraacetate		No data available				
disodium disilicate		No data available				
sodium hydroxide		No data available				

**Terrestrial toxicity**

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
tetrasodium ethylene diamine tetraacetate	LD <sub>50</sub>	156	<i>Eisenia fetida</i>	OECD 207	14	
sodium hydroxide		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	0.25 - 1.25			21	
sodium hydroxide		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available				

**12.2 Persistence and degradability****Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	No data available			
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	No data available			
sodium hydroxide	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate		No data available			
sodium hydroxide		No data available			

**Biodegradation**

## Hounö Protect Detergent

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
tetrasodium ethylene diamine tetraacetate				Weight of evidence	Not readily biodegradable. Inherently biodegradable.
disodium disilicate					Not applicable (inorganic substance)
sodium hydroxide					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT <sub>50</sub>	Method	Evaluation
tetrasodium ethylene diamine tetraacetate					No data available
sodium hydroxide					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT <sub>50</sub>	Method	Evaluation
tetrasodium ethylene diamine tetraacetate					No data available
sodium hydroxide					No data available

**12.3 Bioaccumulative potential**Partition coefficient n-octanol/water (log K<sub>ow</sub>)

Ingredient(s)	Value	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	-3.86	Method not given	No bioaccumulation expected	
disodium disilicate	No data available		Low potential for bioaccumulation	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	1.8	<i>Lepomis macrochirus</i>	OECD 305	Low potential for bioaccumulation	
disodium disilicate	No data available				
sodium hydroxide	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (des)	Method	Soil/sediment type	Evaluation
tetrasodium ethylene diamine tetraacetate	No data available				Adsorption to solid soil phase is not expected
disodium disilicate	No data available				
sodium hydroxide	No data available				Mobile in soil

**12.5 Results of PBT and vPvB assessment**

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

**12.6 Endocrine disrupting properties**

Endocrine disrupting properties - Environmental effects, if available:

**12.7 Other adverse effects**

No other adverse effects known.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Waste from residues / unused products:****European Waste Catalogue:****Empty packaging****Recommendation:****Suitable cleaning agents:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.  
20 01 29\* - detergents containing dangerous substances.

Dispose of observing national or local regulations.  
Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

## Hounö Protect Detergent

**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

- 14.1 UN number: Non-dangerous goods
- 14.2 UN proper shipping name: Non-dangerous goods
- 14.3 Transport hazard class(es): Non-dangerous goods
- 14.4 Packing group: Non-dangerous goods
- 14.5 Environmental hazards: Non-dangerous goods
- 14.6 Special precautions for user: Non-dangerous goods
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

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

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation
- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

**Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII):** Not applicable.

**Ingredients according to EC Detergents Regulation 648/2004**

EDTA and salts thereof	15 - 30 %
polycarboxylates, phosphonates	< 5 %

**Seveso - Classification:** Not classified

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out on the mixture

**SECTION 16: Other information**

*The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract*

**SDS code:** MS1002655

**Version:** 02.2

**Revision:** 2022-12-09

**Reason for revision:**

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 1, 4, 6, 7, 8, 9, 11, 12, 15, 16

**Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

**Full text of the H and EUH phrases mentioned in section 3:**

- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H332 - Harmful if inhaled.
- H335 - May cause respiratory irritation.
- H373 - May cause damage to organs through prolonged or repeated exposure.

**Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement

**Hounö Protect Detergent**

- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

**End of Safety Data Sheet**