

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

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## ClaraClean - L2

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

#### 1.1. Product identifier

Trade name/designation:

ClaraClean - L2

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

Use of the substance/mixture:

Neutralising agent for professional use.

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

Supplier (manufacturer/importer/only representative/downstream user/distributor):

**AVET AG**

Eichwiesstrasse 9

CH-8630 Rüti

Telephone: +41 (0)55 251 40 60

E-mail (competent person): info@encoma-osh.net

Information on the safety data sheet and phone number on behalf of the distributor:

ENCOMA-OSH GmbH, Tel. +41 (0) 79 934 11 52 (Office hours)

#### 1.4. Emergency telephone number

United States of America: Poison control center - national hotline number 1-800-222-1222

Great Britain: National phone number 111

Belgium: Centre antipoisons +32 070 245 245 / Bulgaria: +359 2 9154 233 / Croatia: +3851 2348

342 / Cyprus: +357 1401 / Czech Republic: +420 224 919 293, +420 224 915 402 / Denmark: +45 82

12 12 12 / Estonia: +372 16662, +372 7943 794 / Finland: +358 09 471 77 / France: numéro ORFILA

(INRS) : +33 (0)1 45 42 59 59 / Greece: +30 21077 93777 / Hungary: +36 80 201 199 (24 hours) /

Ireland: +353 (1) 809 2166 / Italy: +39 06 4997800 / Lithuania: +370 (85) 2362052 / Luxembourg:

+352 8002 5500 / The Netherlands: +31 (0) 30 274 8888 / Norway: +47 22 59 13 00 / Portugal: +351

800 250 250 / Romania: +402 213 183 606 / Slovakia: +421 2 5477 4166 / Spain: National Emergency

Telephone Number: +34 91 562 04 20 / Sweden: +46 112 (emergency 24 hours), +46 08-331231 (monfri 9.00-17.00).

European Union: Call 112 if no specific phone number available.

### SECTION 2: Hazards identification

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

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation ( <i>Skin Corr. 1A</i> )	H314: Causes severe skin burns and eye damage.	Calculation method.

#### 2.2. Label elements

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

Hazard pictograms:



**GHS05**

Corrosion

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**Signal word:** Danger

### Hazard statements for health hazards

H314	Causes severe skin burns and eye damage.
------	--

**Supplemental hazard information:** none

### Precautionary statements Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection.
------	--

### Precautionary statements Response

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].
--------------------	--

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/doctor/etc..
------	---

### Precautionary statements Disposal

P501	Dispose of contents/container to an installation for the treatment of hazardous waste.
------	--

## 2.3. Other hazards

**Other adverse effects:**

No data available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

**Hazardous ingredients / Hazardous impurities / Stabilisers:**

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
<b>CAS No.:</b> 1310-73-2 <b>EC No.:</b> 215-185-5 <b>Index No.:</b> 011-002-00-6 <b>REACH No.:</b> 01-2119457892-27-XXXX	<b>sodium hydroxide</b> Skin Corr. 1A (H314) ⚠ <b>Danger</b> <b>Specific concentration limit (SCL)</b> Skin Corr. 1A; H314: $C \geq 5\%$ Skin Corr. 1B; H314: $2\% \leq C < 5\%$ Skin Irrit. 2; H315: $0.5\% \leq C < 2\%$ Eye Dam. 1; H318: $C \geq 2\%$ Eye Irrit. 2; H319: $0.5\% \leq C < 2\%$	25 - 50 weight-%
<b>CAS No.:</b> 1310-58-3 <b>EC No.:</b> 215-181-3 <b>Index No.:</b> 019-002-00-8 <b>REACH No.:</b> 01-2120767289-38-XXXX	<b>potassium hydroxide</b> Acute Tox. 4 (H302), Skin Corr. 1A (H314) ⚠ <b>Danger</b> <b>Specific concentration limit (SCL)</b> Skin Corr. 1A; H314: $C \geq 5\%$ Skin Corr. 1B; H314: $2\% \leq C < 5\%$ Skin Irrit. 2; H315: $0.5\% \leq C < 2\%$ Eye Dam. 1; H318: $C \geq 2\%$ Eye Irrit. 2; H319: $0.5\% \leq C < 2\%$	5 - 10 weight-%

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information:**

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

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### Following inhalation:

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious but breathing normally, place in recovery position and seek medical advice.

### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. Seek medical advice immediately. Wash all protective clothing after use.

### After eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

### Following ingestion:

Rinse mouth. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER.

### Self-protection of the first aider:

Use personal protection equipment.

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

Skin corrosion/irritation. Serious eye damage/eye irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings. Fight against extended fires with a water spray jet or alcohol resistant foam. Carbon dioxide (CO<sub>2</sub>). Extinguishing powder.

#### Unsuitable extinguishing media:

Full water jet.

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

The product itself does not burn.

#### Hazardous combustion products:

In case of fire: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Do not inhale incineration gas.

### 5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

##### Personal precautions:

Keep away unprotected persons. Avoid contact with eyes and skin. Wear chemical resistant protective shoes. Special danger of slipping by leaking/spilling product.

##### Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

#### 6.1.2. For emergency responders

##### Personal protection equipment:

Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

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

#### For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).  
Dispose of the residus of the product as hazardous waste (see section 13).

#### For cleaning up:

Water (with cleaning agent). Use neutralising agent.

### 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

### 6.5. Additional information

Use appropriate container to avoid environmental contamination.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Protective measures

#### Advices on safe handling:

Wear personal protection equipment (refer to section 8).

#### Fire prevent measures:

No special measures are necessary.

#### Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin.

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

#### Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place. storage temperature >0°C.

#### Packaging materials:

Suitable container/equipment material: Refined steel, Polyethylene (PE).

#### Requirements for storage rooms and vessels:

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

#### Hints on storage assembly:

Do not store together with strong acids. Keep away from oxidising agents.

**Storage class (TRGS 510, Germany):** 8B - Non-combustible corrosive substances

### 7.3. Specific end use(s)

#### Recommendation:

Neutralising agent for professional use.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
VLA (FR)	sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	① 2 mg/m <sup>3</sup>
WEL (GB)	sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	② 2 mg/m <sup>3</sup>
ES	sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	② 2 mg/m <sup>3</sup>

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Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
IDLH (US)	sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	① 10 mg/m <sup>3</sup>
OSHA (US)	sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	① 2 mg/m <sup>3</sup>
NIOSH (US)	sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	③ 2 mg/m <sup>3</sup>
ACGIH (US)	sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	③ 2 mg/m <sup>3</sup>
WEL (GB)	potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3	② 2 mg/m <sup>3</sup>
ES	potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3	② 2 mg/m <sup>3</sup>
VLA (FR)	potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3	② 2 mg/m <sup>3</sup>
NIOSH (US)	potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3	③ 2 mg/m <sup>3</sup>
ACGIH (US)	potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3	③ 2 mg/m <sup>3</sup>

### 8.1.2. Biological limit values

No data available

### 8.1.3. DNEL-/PNEC-values

No data available

## \* 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

No data available.

### 8.2.2. Personal protection equipment



#### Eye/face protection:

Wear tightly sealed safety glasses in accordance to EN 166.

#### Skin protection:

Use protective gloves in accordance to EN 374. The following materials are suitable: NBR, butyle rubber, PVC, thickness at least 0.4 mm. Breakthrough time: >6h. Wear protective clothes against chemical agents in accordance to EN 368 or EN465.

#### Respiratory protection:

Not required.

#### Other protection measures:

It's recommended to install an eye bath or to provide at least a sufficient number of eye wash bottles with clean water. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Change contaminated, saturated clothing. Wash hands before breaks and after work.

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### 8.2.3. Environmental exposure controls

Do not allow to enter into surface water or drains.

### 8.3. Additional information

No data available.

## SECTION 9: Physical and chemical properties

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

#### Appearance

**Physical state:** Liquid

**Colour:** colourless

**Odour:** odourless

#### Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	14	20 °C	
Melting point	-5 °C		
Freezing point	<i>not determined</i>		
Initial boiling point and boiling range	100 °C		
Decomposition temperature	<i>not determined</i>		
Flash point	<i>not applicable</i>		
Evaporation rate	<i>not determined</i>		
Auto-ignition temperature	<i>not applicable</i>		
Upper/lower flammability or explosive limits	<i>not applicable</i>		
Vapour pressure	<i>not determined</i>		
Vapour density	<i>not determined</i>		
Density	1.5 g/cm <sup>3</sup>	20 °C	
Relative density	<i>not determined</i>		
Bulk density	<i>not applicable</i>		
Water solubility	easily soluble	20 °C	
Partition coefficient: n-octanol/water	<i>not determined</i>		
Dynamic viscosity	<i>not determined</i>		
Kinematic viscosity	<i>not determined</i>		

### 9.2. Other information

No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable if handled and stored according to recommendations given at chapter 7.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid. May cause strong formation of hydrogen by contact with amphoteric metals (e.g. alumina, lead, zinc) - danger of explosion.

### \* 10.4. Conditions to avoid

Not known.

### \* 10.5. Incompatible materials

ferrous metal. Light metals. Strong acid. Oxidizing agent

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

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### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

<b>potassium hydroxide</b> CAS No.: 1310-58-3 EC No.: 215-181-3
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LD <sub>50</sub> oral: 273 mg/kg (Rat)
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**Acute oral toxicity:**

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

**Acute dermal toxicity:**

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

**Acute inhalation toxicity:**

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

**Skin corrosion/irritation:**

Very corrosive for skin and mucus tissue. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

**Serious eye damage/irritation:**

Corneal opacity.

**Respiratory or skin sensitisation:**

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

**Germ cell mutagenicity:**

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

**Carcinogenicity:**

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

**Reproductive toxicity:**

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

**STOT-single exposure:**

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

**STOT-repeated exposure:**

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

**Aspiration hazard:**

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

**Additional information:**

The product has not been tested. The information in this section is derived from the properties of the individual components.

\* **11.2. Information on other hazards**

**Endocrine disrupting properties:**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Aquatic toxicity:**

No data available.

#### 12.2. Persistence and degradability

**Additional information:**

not applicable

#### 12.3. Bioaccumulative potential

**Bioconcentration factor (BCF):**

not applicable

#### 12.4. Mobility in soil

No data available.

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### 12.5. Results of PBT and vPvB assessment

**sodium hydroxide** CAS No.: 1310-73-2 EC No.: 215-185-5

**Results of PBT and vPvB assessment:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

**potassium hydroxide** CAS No.: 1310-58-3 EC No.: 215-181-3

**Results of PBT and vPvB assessment:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

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

### \* 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

The product is an alkali. Before discharge into sewage plants the product normally needs to be neutralised. After neutralisation, toxicity is no longer observed.

## SECTION 13: Disposal considerations

### \* 13.1. Waste treatment methods

The product may not be eliminated as municipal solid waste nor allowed to end up in the drainage system. These packs can be delivered packaging-specific to the existing collection points for hazardous waste.

#### 13.1.1. Product/Packaging disposal

##### Waste codes/waste designations according to EWC/AVV

###### Waste code product

16 10 01 \* | Aqueous liquid wastes containing hazardous substances

\*: Evidence for disposal must be provided.

###### Remark:

Wastecode according to regulation EU 2014/955

###### Waste code packaging

15 01 10 \* | packaging containing residues of or contaminated by dangerous substances



\*: Evidence for disposal must be provided.

##### Waste treatment options

###### Appropriate disposal / Package:

Residues of the product and packaging have to be collected as hazardous waste.

## SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)
<b>14.1. UN number or ID number</b>	
UN 3266	UN 3266
<b>14.2. UN proper shipping name</b>	
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide , potassium hydroxide )	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide , potassium hydroxide )
<b>14.3. Transport hazard class(es)</b>	
 8	 8
<b>14.4. Packing group</b>	
II	II
<b>14.5. Environmental hazards</b>	
No	No
<b>14.6. Special precautions for user</b>	
<b>Special Provisions:</b> 274	<b>Special Provisions:</b> 274

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Land transport (ADR/RID)	Inland waterway craft (ADN)
<b>Limited quantity (LQ):</b> 1 l	<b>Limited quantity (LQ):</b> 1 l
<b>Excepted Quantities (EQ):</b> E2	<b>Excepted Quantities (EQ):</b> 2
<b>Hazard identification number (Kemler No.):</b> 80	<b>Classification code:</b> C5
<b>Classification code:</b> C5	
<b>Tunnel restriction code:</b> (E)	

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

No data available.

## SECTION 15: Regulatory information

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

#### 15.1.1. EU legislation

##### Other regulations (EU):

Regulation (EC) No. 648/2004 [Detergents regulation]:

Contains <5 % phosphonates

#### 15.1.2. National regulations

No data available

### 15.2. Chemical Safety Assessment

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

### 15.3. Additional information

No data available.

## SECTION 16: Other information

### 16.1. Indication of changes

2.1.	Classification of the substance or mixture
5.2.	Special hazards arising from the substance or mixture
8.2.	Exposure controls
10.4.	Conditions to avoid
10.5.	Incompatible materials
11.2.	Information on other hazards
12.6.	Endocrine disrupting properties
13.1.	Waste treatment methods
14.6.	Special precautions for user
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.2.	Abbreviations and acronyms
16.3.	Key literature references and sources for data

### \* 16.2. Abbreviations and acronyms

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR European agreement concerning the international carriage of dangerous goods by road

CAS Chemical Abstract Service

CLP Classification, labelling and Packaging

EC<sub>50</sub> Effective Concentration 50%

EN European norm

IATA International Air Transport Association

IMDG-Code International Maritime Dangerous Goods Code

LC<sub>50</sub> Lethal Concentration 50%

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LD<sub>50</sub> Lethal Dose 50%

OECD Organization for Economic Cooperation and Development

PBT persistent, bioaccumulative, toxic

PNEC Predicted No Effect Concentration

REACH Registration, Evaluation and Authorization of Chemicals

RID Regulations concerning the international carriage of dangerous goods by rail

SVHC Substance of Very High Concern

UN United Nations

VOC Volatile organic compounds

vPvB very persistent, very bioaccumulative

### \* 16.3. Key literature references and sources for data

Safety data sheet of the manufacturer. Security safety data sheet of the ingredients. Inventory of substances of the European Chemical Agency (ECHA).

### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation ( <i>Skin Corr. 1A</i> )	H314: Causes severe skin burns and eye damage.	Calculation method.

### 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

### 16.6. Training advice

Persons charged with the handling and cleaning of the product must be trained prior to start their work and in regular intervals. They must be informed about the risks using the product and the measures to take for efficient prevention. This concerns particularly working security, first aid, health and environment protection.

### 16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

\* Data changed compared with the previous version.