Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



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

1.1. Product identifier

<u>Trade name</u> Prestan AL

<u>UFI code</u> A4RU-U10D-8U0Y-SKPC

1.2. Relevant identified uses of the substance or mixture and uses advised against <u>Relevant identified uses</u>

Dish detergent for professional users.

<u>Not suitable for use in</u> All other uses are discouraged.

1.3. Details of the supplier of the safety data sheet

<u>Supplier</u> KLEEN PURGATIS GmbH

Street address Dieselstraße 10 32120 Hiddenhausen Germany

Telephone +49 (0) 5223 9970-40

Email info@kleen-purgatis.de

Fax +49 (0) 5223 9970-195

Web site www.kleenpurgatis.de

<u>Contact person</u> Regulatory Affairs

<u>Email address</u> info@kleen-purgatis.de

1.4. Emergency telephone number +49 (0)551 - 19240 (GIZ-Nord)

> <u>Available outside office hours</u> Yes

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Skin corrosion, hazard category 1 Hazardous to the aquatic environment — Acute hazard category 2

Hazard statements

H314, H411

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P280 Wear protective gloves/eye 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.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

More information

Hazardous components which must be listed on the label potassium hydroxide sodium hypochlorite

2.3. Other hazards

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Potassium hydroxide	1310-58-3 215-181-3 01-2119487136- 33-xxxx 019-002-00-8	10 - <15%	Acute Tox. 4 - oral, Skin Corr. 1A	H302, H314 - -	Skin Corr. 1A; H314: $C \ge 5 \%$ Skin Corr. 1B; H314: $2 \% \le C$ < 5 % Skin Irrit. 2; H315: $0,5 \% \le C < 2 \%$ Eye Irrit. 2; H319: $0,5 \% \le C < 2 \%$;
Sodium hypochlorite, solution 13% Cl active	7681-52-9 231-668-3 01-2119488154- 34-xxxx -	10 - 15%	Met. Corr. 1, Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2, STOT SE 3	H290, H314, H318, H335, H400, H411, EUH031 M-acut=10 M-chro=1	EUH031: C ≥ 5 %

Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Description of first aid measures

First responders: Pay attention to self-protection.

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing . Consult a physician if necessary.

Skin contact

In case of contact, immediately flush skin with soap and plenty of water. Call a physician immediately.

Eye contact

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion

Do not induce vomiting. Drink water. Call physician immediately.

Information for doctors

Show this safety data sheet to the doctor in attendance.

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



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

Inhalation

Irritation and / or corrosion of the respiratory tract

Skin contact

Causes severe burns.

Eye contact

Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

Ingestion

If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

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

Treat symptomatically. For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. water spray, extinguishing powder, foam or carbon dioxide.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Corrosive Material . Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self contained breathing apparatus.

Other

<u>Other</u>

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Ensure adequate ventilation, especially in confined areas. Evacuate unaffected personnel from the spill area.

6.2. Environmental precautions

Dam up. The product should not be allowed to enter drains, water courses or the soil.

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

For information on storage and handling see section 7. For information on exposure and personal protective equipment, see Section 8. For information on incompatible materials, see Section 10. For information on disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Wear personal protective equipment. Avoid direct contact with the material / product. Ensure adequate ventilation, especially in confined areas.

General hygiene

When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from food, drink and animal feeding stuffs. Store in a place accessible by authorized persons only.

Storage class according to TRGS 510: 8B (non-flammable, corrosive hazardous substances)

Store in original container.

Storage temperature: 10°C to 40°C

7.3. Specific end use(s)

PC35 - Washing and cleaning products (including solvent based products) See section 1.2: Dish detergent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m³	Short-term exposure limit ppm / mg/m ³	Source	Remark	Year
Sodium hypochlorite, solution 13% Cl active (EU)	7681-52-9 231-668-3	-	0.5 1.5	-	7782-50-5 Chlorine	-

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Туре	Exposure	Value	Population	Effects
potassium hydroxide (1310-58-3/215-181-3)	DNEL	Chronic (long term) Inhalation	1 mg/kg	Workers	Local
sodium hypochlorite, solution 13% Cl active (7681-52-9/231-668-3)	DNEL	Chronic (long term) Oral	0.26 mg/kg	Consumers	Systemic

PNEC/PEC

Product/Substance name (CAS No./EC No.)	Туре	Environmental compartment	Value
sodium hypochlorite, solution 13% Cl active (7681-52-9/231-668-3)	PNEC	Freshwater	0.00021 mg/l
sodium hypochlorite, solution 13% Cl active (7681-52-9/231-668-3)	PNEC	Sewage Treatment Plant	4.69 mg/l

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Eye / face protection

Chemical-resistant safety glasses with side protection (EN 166)

Hand protection

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The break through time depends amongst other things from the material, the thickness and the type of glove and therefore has to be measured for each case. The exact break through time can be obtained from the protective glove producer and this has to be observed.

Other skin protection

long sleeved clothing

Respiratory protection

This type of personal protective equipment is not necessary under normal and foreseeable use of the product.

Thermal hazards

Not applicable

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

<u>Colour</u> Yellow

<u>Odour</u> slight chlorine

Odour threshold

Not determined for the mixture.

Melting point / freezing point

Not determined for the mixture.

Boiling point or initial boiling point and boiling range

Not determined for the mixture.

Flammability

Not applicable.

Lower and upper explosion limit

Not applicable.

<u>Flash point</u>

No data available

Auto-ignition temperature

Not determined for the mixture.

Decomposition temperature

Not determined for the mixture.

<u>рН</u>

12.5 **Method** 1 % aqueous solution

<u>*Kinematic viscosity*</u> Not determined for the mixture.

<u>Viscosity, dynamic</u> Not determined for the mixture.

Solubility No data available

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



Water solubility

miscible

Partition coefficient n-octanol/water

Not determined for the mixture.

<u>Vapour pressure</u>

Not determined for the mixture.

Density and/or relative density

1.34 g/cm³

Relative vapour density

Not determined for the mixture.

Evaporation Rate

Not determined for the mixture.

Explosive properties

The product / mixture has no explosive properties.

Oxidising properties

The product / mixture has no oxidizing properties.

<u>VOC %</u>

< 3 %

Particle characteristics

This product / mixture does not contain any nanomaterials or nanoforms as defined in Regulation (EC) 1907/2006.

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at normal conditions

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

None under normal use. Neutralization can generate a lot of heat.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30

10.5. Incompatible materials

strong acids and oxidizing agents

10.6. Hazardous decomposition products

For information on combustion products, see Section 5. By heating or fire toxic gas is liberated.

SECTION 11: Toxicological information

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

Toxicology data for the components

Acute toxicity

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

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline	Remarks
potassium hydroxide 1310-58-3 / 215-181-3	LD50	333-388 mg/kg	Oral	-	rat	-	ECHA
sodium hypochlorite, solution 13% Cl active 7681-52-9 / 231-668-3	LC50	10,5 ppm	Inhalation	1h	rat	OECD 403	-
sodium hypochlorite, solution 13% Cl active 7681-52-9 / 231-668-3	LD50	1.100 mg/kg	Oral	-	rat	OECD 401	-

Skin corrosion/irritation

Skin corrosion, hazard category 1B

Serious eye damage/irritation

Serious eye damage, hazard category 1

Germ cell mutagenicity

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

Mutagenicity

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





Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

SECTION 12: Ecological information

12.1. Toxicity

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
sodium hypochlorite, solution 13% Cl active 7681-52-9 / 231-668-3	LC50	0,01-0,1 mg/l	96h	Fisch

- 12.2. Persistence and degradability <u>Persistence and degradability</u> No information available
 - <u>Decay/transformation</u> No information available
- **12.3. Bioaccumulative potential** No data available

12.4. Mobility in soil

Mobility

No information available

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

12.6. Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

12.7. Other adverse effects

Other adverse effects

This product / mixture does not contain any substances within the meaning of Regulation (EC) No. 1005/2009 that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Dispose of as hazardous waste in compliance with local and national regulations.

Packaging

Do not re-use empty containers. Empty containers should be taken for local recycling, recovery or waste disposal. Contaminated packaging: Dispose of as unused product.

Waste code	Description
06 02 04*	sodium and potassium hydroxide
Please note - an asterisk (*) next to a code denotes that it is HAZARDOUS WASTE.	

SECTION 14: Transport information

14.1. UN number

UN 1814

14.2. UN proper shipping name POTASSIUM HYDROXIDE SOLUTION

IMDG proper shipping name POTASSIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

<u>Label</u>



Environmental hazard

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



ADR / RID Class

8

ADR / RID Classification code C5

ADR / RID hazard identification number 80

IMDG Class

8

IATA Class 8

ADN Class 8

ADN Class Code C5

14.4. Packing group

Ш

14.5. Environmental hazards

Environmental hazards

The product contains following substances which are hazardous for the environment: sodium hypochlorite

IMDG Marine Pollutant

No

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Other

Additional information ADR-RID

LQ: 1 L EQ: E2 Transport category (tunnel restriction code): 2 (E)

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



SECTION 15: Regulatory information

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

Regulation (EC) No. 648/2004 (detergents) Ingredients according to Annex VII: <5% chlorine-based bleaching agents, polycarboxylates, 5-15% phosphates.

Regulation (EC) No. 1272/2008 (CLP)

Regulation (EC) No. 1907/2006 (REACH) Substances subject to authorization according to Annex XIV: No Substance restrictions according to Annex XVII: No Substances on the REACH candidate list (SVHC): No

Regulation (EU) No. 528/2012 (BPR) Active ingredients: not applicable

Regulation (EU) 2019/1148 (explosives) Restricted raw material according to Annex I: not applicable Notifiable raw materials according to Annex II: not applicable

Directive 2011/65 / EU (ROHS 2) Substance restrictions according to Annex II: not applicable

Regulation (EU) 2019/1021 (POP) Persistent organic pollutants: not applicable

Directive 2012/18/EU (Seveso III) Seveso hazard category: not applicable

National regulations

In addition, comply with all national and local regulations for the handling of chemicals.

<u>Other regulations, limitations and legal regulations</u> Take note of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical safety assessment

The mixture has not been subjected to a safety assessment.

SECTION 16: Other information

Changes to previous revision

Adaptation to the amending regulation (EU) 2020/878 Section 2. Hazards identification Section 14. Transport information Evaluation methods for classification of sodium hypochlorite has changed.

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



Abbreviations

ADN - Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

- ADR Accord relatif au transport international des marchandises Dangereuses par Route
- CAS Chemical Abstract Service
- CLP Classification, Labelling and Packaging
- DMEL Derived Minimum Effect Level
- DNEL Derived no effect level
- EC50 Half maximal effective concentration 50%
- GHS Globally Harmonised System
- IATA International Air Transport Association
- IMDG International Maritime Dangerous Goods
- LC50 Lethal concentration 50%
- LD50 Lethal dosis 50 %
- MARPOL International Convention for the Prevention of Pollution from Ships
- PBT Persistent, bioaccumulative and toxic substance
- PEC Predicted Environmental Concentration
- PNEC predicted no effect concentration
- REACH Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID Reglement concernant le transport international ferroviaire de marchandises Dangereuses
- SVHC Substance of very high concern
- vPvB Very persistent, very bioaccumulative substance

References to key literature and data sources

REACH registration dossiers ECHA C&L - Inventory Safety data sheets from raw material suppliers

Evaluation methods for classification

Classification for mixtures and used evaluation method according to Article 9 of regulation (EC) 1272/2008 [CLP]: Health hazards: calculation method

Prestan AL

 Version number:
 5

 Issued:
 2021-09-21

 Replaces SDS:
 2020-09-30



Phrase meaning

Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4 Skin Corr. 1A - Skin corrosion, hazard category 1A Met. Corr. 1 - Corrosive to metals, hazard category 1 Skin Corr. 1B - Skin corrosion, hazard category 1B Eye Dam. 1 - Serious eye damage, hazard category 1 Aquatic Acute 1 - Hazardous to the aquatic environment — Acute hazard category 1 Aquatic Chronic 2 - Hazardous to the aquatic environment — Chronic hazard category 2 STOT SE 3 - Specific Target Organ Toxicity — Single exposure, hazard category 3 H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects. EUH031 Contact with acids liberates toxic gas.

Other

Additional information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878.

Manufacturer's notes

Legal disclaimer: The above information is believed to be correct. This company shall not be held liable for any damage resulting from handling or from contact with the above product.