

SAFETY DATA SHEET

ALSAFF

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	20.02.2014
Revision date	18.03.2021

1.1. Product identifier

Product name	ALSAFF
Article no.	1000014, 1000016, 1000018

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

Use of the substance / mixture	Dishwashing liquid for automatic dispensers.
Relevant identified uses	PROC1 Use in closed process, no likelihood of exposure
Uses advised against	Uses other than those identified are not recommended.
The chemical can be used by the general public	No
The chemical is used by general public only	No

1.3. Details of the supplier of the safety data sheet

Company name	Tandur h.f.
Office address	Hestháis 12
Postcode	110
City	Reykjavík
Country	ICELAND
Telephone number	00354 510 1200
Email	tandur@tandur.is
Website	www.tandur.is

1.4. Emergency telephone number

Emergency telephone	Telephone number: (+354)-543-2222 Description: EMERGENCY# POISON CENTER
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Telephone number: 112
Description: POISON CENTER EMERGENCY#

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Corr. 1A; H314

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label	Sodium hydroxide 5 - 15 % wt/wt
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage.
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / 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 or doctor / physician.

2.3. Other hazards

PBT / vPvB	This product does not contain any PBT or vPvB substances.
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SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Potassium silicate	CAS No.: 1312-76-1 EC No.: 215-199-1 REACH Reg. No.: 01-2119456888-17	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	5 - 15 % wt/wt	
Sodium hydroxide	CAS No.: 1310-73-2 EC No.: 215-185-5 Index No.: 011-002-00-6	Skin Corr 1A; H314 Met. Corr. 1; H290	5 - 15 % wt/wt	

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Call a POISON CENTER or doctor/physician if you feel unwell. Show this SDS.
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Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
Skin contact	Flush skin thoroughly with water. Take off contaminated clothing and wash before reuse. Get medical advice/attention.
Eye contact	Promptly wash eyes with plenty of water while lifting the eye lids. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. Continue flushing during transport to hospital.
Ingestion	Rinse mouth thoroughly. Drink a few glasses of water or milk. Immediately call a POISON CENTER or doctor/physician.
Recommended personal protective equipment for first aid responders	Wear protective gloves / protective clothing / eye protection / face protection.

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

Information for health personnel	CORROSIVE PRODUCT: Contains CAUSTIC SODA
Acute symptoms and effects	Causes severe skin burns and eye damage. See further section 11.1 under "Potential Acute Effects"

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.
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5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters

Personal protective equipment	Wear respiratory protection. Wear protective gloves / protective clothing / eye protection / face protection.
Fire fighting procedures	Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Wear protective gloves / protective clothing / eye protection / face protection. Call a POISON CENTER or doctor/physician if you feel unwell.
Hazardous combustion products	Not relevant.
For emergency responders	Wear protective gloves / protective clothing / eye protection / face protection. Call a POISON CENTER or doctor/physician if you feel unwell.

6.2. Environmental precautions

Environmental precautionary measures	Avoid release to the environment. Collect spillage.
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6.3. Methods and material for containment and cleaning up

Cleaning method	Collect spillage.
Containment	Store in a closed container.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Alkalis. First-aid equipment, including eye wash bottle, must be available at the work site.
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Protective safety measures

Preventitive measures to protect the environment	Prevent the product to reach sewage water or drainage system undiluted or unneutralized. Collect spillage if possible.
Advice on general occupational hygiene	Private clothes and working clothes should be kept separately.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Corrosive storage. Keep in original container. Store protected from acids. Keep container tightly closed. Keep away from food, drink and animal feeding stuffs.
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7.3. Specific end use(s)

Specific use(s)	See 1.2
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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Potassium silicate	CAS No.: 1312-76-1		
Sodium hydroxide	CAS No.: 1310-73-2	Limit value (short term) Value: 2 mg/m ³	TWA Year: 2011

DNEL / PNEC

Substance	Potassium silicate
DNEL	<p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 1,38 mg/m³</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 0,74 mg/kg bw/d</p> <p>Group: Professional Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 5,61 mg/m³</p>

PNEC	Group: Professional Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 1,49 mg/kg bw/d
	Group: Consumer Route of exposure: Long term (repeated) - Oral - Systemic effect Value: 0,74 mg/kg bw/d
	Route of exposure: Sewage treatment plant STP Value: 348 mg/l
	Route of exposure: Water Value: 7,5 mg/l Reference: Fresh water
	Route of exposure: Water Value: 1 mg/l Reference: Marine water
Substance	Sodium hydroxide
DNEL	Group: Worker Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 1 mg/m ³
	Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 1 mg/m ³
	Group: Consumer Route of exposure: Short term (acute) - Dermal - Local effect Value: 2%
	Group: Worker Route of exposure: Short term (acute) - Dermal - Local effect Value: 2%

8.2. Exposure controls

Limitation of exposure on workplace

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Protective gloves and goggles are recommended.

Safety signs



Precautionary measures to prevent exposure

Instruction on measures to prevent exposure

Secure access of workers to safety information.

Organisational measures to prevent exposure

Avoid direct contact and/or splashes where possible. Train personnel.

Technical measures to prevent exposure

Use only through automatic dosing systems. Use safety glasses/goggles and

protective clothing.

Eye / face protection

Eye protection	Use approved safety goggles or face shield. Safety glasses should have side shields.
Suitable eye protection	Safety glasses should have side shields.
Reference to relevant standard	EN 166

Hand protection

Hand protection	Wear protective gloves.
Skin- / hand protection, short term contact	Butylrubber: Penetration time: ≥ 480 min Material thickness: $\geq 0,7$ mm
Suitable gloves type	Butylrubber (prolonged contact) Nitrilrubber (protection against splashes) Chloroprene rubber. Polyvinyl chloride (PVC). Rubber (natural, latex).
Thickness of glove material	Value: $\geq 0,4$ mm
Reference to relevant standard	EN 374

Skin protection

Skin protection (except hands)	Wear suitable protective clothing as protection against splashing or contamination.
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Respiratory protection

Respiratory protection	Under normal conditions of use respiration protection should not be required.
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Appropriate environmental exposure control

Environmental exposure controls	Should not reach sewage water or drainage system undiluted or unneutralized.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	No characteristic odour.
pH	Status: In delivery state Value: $> 12,5$
Bulk density	Value: $= 1,24$ g/ml Temperature: ~ 20 °C
Solubility in water	Soluble in all proportions.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity

Reactivity issues of concern are mainly due to the caustic soda content of the mixture. Caustic soda is a highly reactive substance. It is corrosive on live tissue. It may also damage certain types of surface material such as some different floor types. These effects of caustic soda become less and less significant as the mixture is diluted with water.
If the mixture is stored and used as recommended there should be no danger due to its reactivity.

10.2. Chemical stability

Stability

The mixture is stable under normal storage and use conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4. Conditions to avoid

Conditions to avoid

None known under normal storage and use conditions.

10.5. Incompatible materials

Materials to avoid

Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products

No hazardous decomposition products.

SECTION 11: Toxicological information

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

Substance

Potassium silicate

Acute toxicity

Type of toxicity: Acute
Effect tested: LD50
Route of exposure: Oral
Value: > 2000 mg/kg bw
Animal test species: Rat

Type of toxicity: Acute
Effect tested: LD50
Route of exposure: Dermal
Value: > 5000 mg/kg bw

Substance

Sodium hydroxide

Acute toxicity

Type of toxicity: Acute
Effect tested: LD50

Route of exposure: Oral
Value: = 1350 mg/kg
Animal test species: Rat
Test reference: Method not given

Type of toxicity: Acute
Effect tested: LD50
Route of exposure: Dermal
Value: = 1350 mg/kg
Animal test species: Rabbit
Test reference: Method not given

Type of toxicity: Acute
Effect tested: LC50
Route of exposure: Inhalation.
Value: = 4800 mg/l
Animal test species: Mouse
Test reference: Method not given

Other information regarding health hazards

Inhalation	No known chronic or acute health risks.
Skin contact	Causes severe burns.
Eye contact	Highly Corrosive. Risk of serious damage to eyes. Immediate first aid is necessary.
Ingestion	Corrosive. Even small amounts may cause serious damage.
Mutagenicity	No information available on mixture. However, studies have not shown any indication of mutagenicity of individual substances in the mixture.
Carcinogenicity, other information	No information or data available on mixture. However, there is no evidence of carcinogenicity on individual substances in the mixture.
Reproductive toxicity	No information or data available on mixture. However, studies have not shown any indication of reproductive toxicity for individual substances in the mixture.

11.2 Other information

Comments	See 4.1
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SECTION 12: Ecological information

12.1. Toxicity

Substance	Potassium silicate
Aquatic toxicity, fish	Value: > 100 mg/l Species: DIN EN ISO 7346-2
Substance	Sodium hydroxide
Aquatic toxicity, fish	Value: = 196 mg/l Test duration: 96 h Species: Various species
Substance	Potassium silicate

Aquatic toxicity, algae	Value: > 100 mg/l Method: Estimate.
Substance	Sodium hydroxide
Aquatic toxicity, algae	Value: = 22 mg/l Test duration: 0,25 h Species: Photobacterium phsophoreum Method: Method not given
Substance	Potassium silicate
Aquatic toxicity, crustacean	Value: > 100 mg/l Method: OECD Guideline 202. part 1
Substance	Sodium hydroxide
Aquatic toxicity, crustacean	Value: = 40,4 mg/l Test duration: 48 h

12.2. Persistence and degradability

Persistence and degradability, comments	No information is available on mixture. The mixture contains caustic soda which is an inorganic water soluble salt. Biodegradability is therefore not relevant.
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12.3. Bioaccumulative potential

Bioaccumulative potential	No data recorded.
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12.4. Mobility in soil

Mobility	Not regarded as dangerous for the environment. However, the product is highly alkaline and may affect local environment due to high pH value. Upon dilution, alkalinity/pH value drops rapidly and effects decrease accordingly.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	This product does not contain any PBT or vPvB substances.
Substance	Potassium silicate
PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.

12.6. Endocrine disrupting properties

12.7. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Avoid release to the environment. Dispose of waste and residues in accordance with local authority requirements.
EWC waste code	EWC waste code: 200115 alkalines
National regulations	Regulation 184/2002 Regulation 786/1999

Other information	Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.
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SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	1824
IMDG	1824
ICAO/IATA	1824

14.2. UN proper shipping name

ADR/RID/ADN	SODIUM HYDROXIDE SOLUTION
IMDG	SODIUM HYDROXIDE SOLUTION
ICAO/IATA	SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN	8
IMDG	8
ICAO/IATA	8

14.4. Packing group

ADR/RID/ADN	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

ADR/RID Other information

Hazard No.	80
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IMDG Other information

EmS	F-A, S-B
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SECTION 15: Regulatory information

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

Legislation and regulations	This safety datasheet is in compliance with the following EU legislation and its adaptations - as far as applicable:
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Regulation 1907/2006 and later 750/2008 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Amendments on Annex II of the REACH regulation with EU regulation 453/2010.

Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures which replaces EU legislations 67/548/EEC and 1999/45/EC and changes regulation No. 1907/2006.

15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	<p>H290 May be corrosive to metals.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H319 Causes serious eye irritation.</p> <p>H335 May cause respiratory irritation.</p>
Abbreviations and acronyms used	<p>GHS: Globally Harmonized System</p> <p>CLP: Classification, labelling and packaging</p> <p>DNEL: Derived No Effect Limit (afleidd áhrifaleysismörk).</p> <p>PBT: Persistent, Bioaccumulative and Toxic</p> <p>PNEC: Predicted No Effect Concentration</p> <p>vPvB: Very Persistent and very Bioaccumulative</p> <p>REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.</p>
Information added, deleted or revised	Section 2.2: outdated R-phrases removed
Version	3
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