

SAFETY DATA SHEET**T-CIP 2000**

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	25.03.2015
Revision date	30.03.2021

1.1. Product identifier

Product name	T-CIP 2000
Article no.	1476046, 1476048

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

Relevant identified uses	PROC1 Use in closed process, no likelihood of exposure
Uses advised against	Use on in accordance with instructions.
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
	Telephone number: 112 Description: EMERGENCY# POISON CENTER

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
	Met. Corr. 1; H290

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label	Sodium hydroxide 15 - 30 % wt/wt
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage. H290 May be corrosive to metals.
Precautionary statements	P260 Do not breathe dust / fume / gas / mist / vapours / spray. P264 Wash hands thoroughly after handling. P280 Wear protective gloves / protective clothing / eye protection / face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER / doctor / . P363 Wash contaminated clothing before reuse. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P405 Store locked up. P501 Dispose of contents / container to an approved waste disposal plant.

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
Sodium hydroxide	CAS No.: 1310-73-2	Skin Corr 1A; H314	15 - 30 % wt/wt	
	EC No.: 215-185-5	Met. Corr. 1; H290		
	Index No.: 011-002-00-6			
C6 Alkyl glucoside	CAS No.: 54549-24-5	Eye Dam. 1; H318	1 - 5	
	EC No.: 259-217-6			
	REACH Reg. No.: 01-2119492545-29			

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.
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	Rinse cautiously with water for several minutes. 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 medical attention immediately! 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	Foam, carbon dioxide or dry powder.
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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	No data recorded.
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

Other instructions	See 8.2
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	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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Conditions for safe storage

Technical measures and storage conditions	Alkalis.
Advice on storage compatability	Alkalis.
Storage temperature	Value: ~ 20 °C

7.3. Specific end use(s)

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

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Sodium hydroxide	CAS No.: 1310-73-2	Limit value (short term) Value: 2 mg/m3	TWA Year: 2011
C6 Alkyl glucoside	CAS No.: 54549-24-5		

DNEL / PNEC

Substance	Sodium hydroxide
DNEL	<p>Group: Worker Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 1 mg/m³</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 1 mg/m³</p> <p>Group: Consumer Route of exposure: Short term (acute) - Dermal - Local effect Value: 2%</p> <p>Group: Worker Route of exposure: Short term (acute) - Dermal - Local effect Value: 2%</p>
Substance	C6 Alkyl glucoside
DNEL	<p>Group: Professional Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 420 mg/m³</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Oral - Systemic effect Value: 35,7 mg/kg bw/day</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 124 mg/m³</p> <p>Group: Professional Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 595000 mg/kg bw/day</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 357000 mg/kg bw/day</p>
PNEC	<p>Route of exposure: Water Value: 0,01 mg/l Reference: Marine water</p> <p>Route of exposure: Soil Value: 0,654 mg/kg dry weight</p> <p>Route of exposure: Sediment Value: 0,0410 mg/day dry weight Reference: Fresh water sediment Marine sediment</p> <p>Route of exposure: Sediment Value: 0,410 mg/kg dry weight Reference: Fresh water sediment</p> <p>Route of exposure: Sewage treatment plant STP Value: 100 mg/l</p> <p>Route of exposure: Water</p>

Value: 0,1 mg/l
Reference: Fresh water

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 glasses, 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, long term contact

Butyl rubber:
 Penetration time: ≥ 480 min
 Material thickness: $\geq 0,7$ mm

Suitable gloves type

Butyl rubber.
 Nítrígúmmí
 Chloroprene rubber.
 Polyvinyl chloride (PVC).
 Rubber (natural, latex).

Thickness of glove material

Value: 0,5-0,7 mm

Reference to relevant standard

EN 374

Skin protection

Skin protection (except hands)

Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection

Respiratory protection	Under normal conditions of use respiration protection should not be required. In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P2).
Tasks needing respiratory protection	Not determined.

Appropriate environmental exposure control

Environmental exposure controls	Should not reach sewage or drainage system undiluted or unneutralized.
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Appropriate environmental exposure control

Exposure controls and personal protection, additional information	To be used only in closed systems (CIP).
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Colourless liquid.
Colour	Colourless.
Odour	No characteristic odour.
pH	Status: In delivery state Value: > 12,5
Bulk density	Value: = 1,33 g/ml Temperature: ~ 20 °C
Solubility in water	Fully miscible.

9.2. Other information

Physical hazards

Metal corrosion	Corrosive to aluminium and other light metals.
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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 corrodes light metals such as aluminium, releasing hydrogen gas as a byproduct. 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.
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10.2. Chemical stability

Stability	The mixture is stable under normal storage and use conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No hazardous reactions known under normal storage and use conditions.
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10.4. Conditions to avoid

Conditions to avoid	May attack light-alloy metals and liberate hydrogen gas. The solution is strongly alkaline and reacts with strong acids with heat generation.
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10.5. Incompatible materials

Materials to avoid	Acid reactive. Will corrode copper, zinc, aluminium and their alloys.
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10.6. Hazardous decomposition products

Hazardous decomposition products	No 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

Substance	Sodium hydroxide
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: = 1350 mg/kg Animal test species: Rat Test reference: Method not given</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: = 1350 mg/kg Animal test species: Rabbit Test reference: Method not given</p> <p>Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Value: = 4800 mg/l Animal test species: Mouse Test reference: Method not given</p>

Other information regarding health hazards

General	This substance is corrosive.
Inhalation	Highly Corrosive. Serious damage to the lining of nose, throat and lungs.
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

SECTION 12: Ecological information

12.1. Toxicity

Substance	Sodium hydroxide
Aquatic toxicity, fish	Value: = 196 mg/l Test duration: 96 h Species: Various species
Substance	C6 Alkyl glucoside
Aquatic toxicity, fish	Value: > 100 mg/l Test duration: 96 h
Substance	Sodium hydroxide
Aquatic toxicity, algae	Value: = 22 mg/l Test duration: 0,25 h Species: Photobacterium phsophoreum Method: Method not given
Substance	C6 Alkyl glucoside
Aquatic toxicity, algae	Value: > 100 Test duration: 72 h
Substance	Sodium hydroxide
Aquatic toxicity, crustacean	Value: = 40,4 mg/l Test duration: 48 h
Substance	C6 Alkyl glucoside
Aquatic toxicity, crustacean	Value: > 100 mg/l Test duration: 48 h Species: Daphnia magna (Water flea) Comments: The value is estimated from tests on similar products.

12.2. Persistence and degradability

Persistence and degradability, comments	No information available on mixture. However, individual substances are all classified as readily biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	No data recorded.
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12.4. Mobility in soil

Mobility	The product is not classified as dangerous for the environment. However, the high alkalinity (pH value > 12,5) of the product may have harmful local effects on the ecosystem.
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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	C6 Alkyl glucoside
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.
Relevant waste regulation	Regulation no. 737/2003
Hazardous waste packing	Avoid release to the environment.
EWC waste code	EWC: 200115 alkalines
National regulations	Regulation about hazardous waste and other type of waste: 184/2002; replacement regulation: 428/2003
Other information	Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

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	<p>This safety datasheet is in compliance with the following EU legislation and its adaptations - as far as applicable:</p> <p>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.</p> <p>Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures which replaces EU legislations 67/548/EEC og 1999/45/EEC and changes regulation No. 1907/2006.</p>
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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>H318 Causes serious eye damage.</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: Regulation, Evaluation, Authorization and Restriction of Chemicals.</p>

Information added, deleted or revised	Section 2: Applicable precautionary statements were added. or removed. Outdated hazard pictograms (old regulation 67/548/EBE eða 1999/45/EB) and statements removed.
Revision responsible	Alfred Aðalsteinsson (M.Sc. Chemistry); email: alfred@tandur.is
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