

## SAFETY DATA SHEET

## QED-K

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	29.10.2014
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**1.1. Product identifier**

Product name	QED-K
Article no.	1464006, 1464008, 1464009

**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	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	<a href="mailto:tandur@tandur.is">tandur@tandur.is</a>
Website	<a href="http://www.tandur.is">www.tandur.is</a>

**1.4. Emergency telephone number**

Emergency telephone	Telephone number: (+354)-543-2222 Description: POISON CENTER  Telephone number: 112 Description: EMERGENCY#
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC	C; R35;
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. 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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P309+P311 IF exposed or if you feel unwell: 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
Sodium hydroxide	CAS No.: 1310-73-2 EC No.: 215-185-5 Index No.: 011-002-00-6 REACH Reg. No.: UN 1824	Skin Corr. 1A;H314	5 - 15 % wt/wt	1 Additive Active substance

<sup>1</sup>Substance classified with a health or environmental hazard

## 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	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. 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	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 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	<b>Limit value (short term)</b> Value: 2 mg/m3	TWA Year: 2011

### DNEL / PNEC

Substance	Sodium hydroxide
DNEL	<b>Group:</b> Consumer <b>Route of exposure:</b> Short term (acute) - Dermal - Local effect <b>Value:</b> 2%  <b>Group:</b> Worker <b>Route of exposure:</b> Long term (repeated) - Inhalation - Local effect

**Value:** 1 mg/m<sup>3</sup>

**Group:** Consumer

**Route of exposure:** Long term (repeated) - Inhalation - Local effect

**Value:** 1 mg/m<sup>3</sup>

**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 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

Bútýlgúmmí:  
Penetration time:  $\geq 480$  min  
Þykkt:  $\geq 0,7$  mm

Suitable gloves type

Butyl rubber.  
Nítrílhanskar  
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.
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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# SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Yellow.
Odour	No characteristic odour.
pH	Status: In delivery state Value: > 12,5 Method: neat
Freezing point	Value: < 0 °C Comments: Exact value not determined
Boiling point / boiling range	Comments: Not determined.
Bulk density	Value: = 1,20 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	<p>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.</p> <p>If the mixture is stored and used as recommended there should be no danger due to its reactivity.</p>
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## 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

May attack light-alloy metals and liberate hydrogen gas. The solution is strongly alkaline and reacts with strong acids with heat generation.

## 10.5. Incompatible materials

### Materials to avoid

Acid reactive. Will corrode copper, zinc, aluminium and their alloys.

## 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

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:** Rabbits

**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

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	<b>Value:</b> = 196 mg/l <b>Test duration:</b> 96 h <b>Species:</b> Various species <b>Method:</b> Method not given
Substance	Sodium hydroxide
Aquatic toxicity, algae	<b>Value:</b> = 22 mg/l <b>Test duration:</b> 0,25 h <b>Species:</b> Photobacterium phsophoreum <b>Method:</b> Method not given
Substance	Sodium hydroxide
Aquatic toxicity, crustacean	<b>Value:</b> = 40,4 mg/l <b>Test duration:</b> 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	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.
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### 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	Reglugerð 737/2003
Hazardous waste packing	Avoid release to the environment.
Product classified as hazardous waste	Yes
Packaging classified as hazardous waste	Yes
EWC waste code	EWC: 060204 sodium and potassium hydroxide
National regulations	Regulation 184/2002 Regulation 786/1999
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	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
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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)	H314 Causes severe skin burns and eye damage.
Abbreviations and acronyms used	GHS: Globally Harmonized System CLP: Classification, labelling and packaging DNEL: Derived No Effect Limit (afleidd áhrifaleysisþörmörk). PBT: Persistent, Bioaccumulative and Toxic PNEC: Predicted No Effect Concentration vPvB: Very Persistent and very Bioaccumulative REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.
Revision justification	Other.
Information added, deleted or revised	Section 3: Name of ingredient changed.
Revision responsible	Brynleifur Björnsson (M.Sc. Pharm.) brynleifur@tandur.is
Last update date	18.08.2023
Checking quality of information	Not relevant.
Version	2
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