	<h1>SAFETY DATA SHEET</h1>	Page : 1 / 20
		Revision nr : 1.0
	<h2>Caustic Soda Solution at 50%</h2>	Issue date : 27/06/2024
		Supersedes :

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

#### 1.1. Product identifier

Product form : Substance  
Trade name : Caustic Soda Solution at 50%  
EC Index : 011-002-00-6  
EC-No. : 215-185-5  
CAS-No. : 1310-73-2  
Formula : NaOH

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

##### 1.2.2. Uses advised against

No additional information available

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

Qatar Vinyl Company Ltd. (QVC)  
P.O. Box 24440  
Doha  
State of Qatar

#### 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

### SECTION 2: Hazards identification

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


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

Corrosive to metals, Category 1 H290  
Skin corrosion/irritation, Category 1, Sub-Category 1A H314  
Serious eye damage/eye irritation, Category 1 H318

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

	<b>SAFETY DATA SHEET</b>	Page : 2 / 20
		Revision nr : 1.0
	<b>Caustic Soda Solution at 50%</b>	Issue date : 27/06/2024
		Supersedes :

## 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word :

Danger

Hazard statements (CLP) :

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) :

P260 - Do not breathe gas, mist, spray, vapours.

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): 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/doctor.

Listed on CLP Annex VI :

EC Index-No.: 011-002-00-6

## 2.3. Other hazards

Other hazards :

Results of PBT and vPvB assessment : The product does not meet the PBT and vPvB classification criteria.


The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance name	: sodium hydroxide; caustic soda
CAS-No.	: 1310-73-2
EC-No.	: 215-185-5
EC Index	: 011-002-00-6

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium hydroxide; caustic soda	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index: 011-002-00-6	49 – 51	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318

	<b>SAFETY DATA SHEET</b>	Page : 3 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

**Specific concentration limits:**

Substance name	Product identifier	Specific concentration limits (%)
sodium hydroxide; caustic soda	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index: 011-002-00-6	(0,5 ≤ C < 2) Eye Irrit. 2, H319 (0,5 ≤ C < 2) Skin Irrit. 2, H315 (2 ≤ C < 5) Skin Corr. 1B, H314 (5 ≤ C < 100) Skin Corr. 1A, H314

Full text of H- and EUH-statements: see section 16

**3.2. Mixtures**

Not applicable

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

Additional advice	: First aider: Pay attention to self-protection!. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance.
Inhalation	: Remove casualty to fresh air and keep warm and at rest. Give oxygen or artificial respiration if necessary. Get immediate medical advice/attention.
Skin contact	: Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water. Get immediate medical advice/attention.
Eyes contact	: Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
Ingestion	: Rinse mouth thoroughly with water. Do NOT induce vomiting. Get immediate medical advice/attention.

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

Inhalation	: The following symptoms may occur: May cause nose, throat, and lung irritation, Cough.
Skin contact	: Causes severe burns. The following symptoms may occur: Redness, pain.
Eyes contact	: Causes serious eye damage. The following symptoms may occur: Redness, pain, Tears.
Ingestion	: Causes severe burns. The following symptoms may occur: Severe irritation or burns to the mouth, throat, oesophagus, and stomach.


**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	: carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.
Unsuitable extinguishing media	: Strong water jet.

	<b>SAFETY DATA SHEET</b>	Page : 4 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

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

- Specific hazards : Not flammable. Heating will cause a rise in pressure with a risk of bursting.
- Reactivity in case of fire : Reacts exothermically with (some) metals: release of highly flammable gases/vapours (hydrogen).

**5.3. Advice for firefighters**

- Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.
- Other information : Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

**SECTION 6: Accidental release measures**

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

**6.1.1. For non-emergency personnel**

- For non-emergency personnel : Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

**6.1.2. For emergency responders**

- For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

**6.2. Environmental precautions**


Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

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

- Methods for cleaning up : Stop leak if safe to do so. Dam up the liquid spill. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). This material and its container must be disposed of in a safe way, and as per local legislation.

**6.4. Reference to other sections**

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

	<b>SAFETY DATA SHEET</b>	Page : 5 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment.
Hygiene measures	: Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

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

Technical measures	: Keep in an area equipped with alkali resistant flooring.
Storage conditions	: Store in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Bund storage facilities to prevent soil and water pollution in the event of spillage.
Incompatible materials	: Acids. Halogenated hydrocarbons.
Storage temperature	: $\geq 20$ °C
Packaging materials	: Keep only in the original container. Store in corrosive resistant container with a resistant inner liner. Suitable material: Steel, Stainless steel. Unsuitable material: Aluminium, copper, Copper alloys, Zinc and its alloys.

#### Switzerland

Storage class (LK)	: LK 8 - Corrosive materials
--------------------	------------------------------

### 7.3. Specific end use(s)


No data available.

## SECTION 8: Exposure controls/personal protection


### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values


<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
<b>Austria - Occupational Exposure Limits</b>	
Local name	Natriumhydroxid (Ätznatron)
MAK (OEL TWA)	2 mg/m <sup>3</sup> (inhalable fraction)
MAK (OEL STEL)	4 mg/m <sup>3</sup> (inhalable fraction)
Regulatory reference	BGBl. II Nr. 156/2021

	<b>SAFETY DATA SHEET</b>	Page : 6 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Sodium (hydroxyde de) # Natriumhydroxide
OEL TWA	2 mg/m <sup>3</sup>
Remark	M: La mention M indique que lors d'une exposition supérieure à la valeur limite, des irritations apparaissent ou un danger d'intoxication aiguë existe. Le procédé de travail doit être conçu de telle façon que l'exposition ne dépasse jamais la valeur limite. Lors des mesurages, la période d'échantillonnage doit être aussi courte que possible afin de pouvoir effectuer des mesurages fiables. Le résultat des mesurages est calculé en fonction de la période d'échantillonnage.# De vermelding M duidt aan dat bij de blootstelling boven de grenswaarde irritatie optreedt of er gevaar bestaat voor acute vergiftiging. Het werkproces moet zo zijn ontworpen dat de blootstelling de grenswaarde nooit overschrijdt. Bij een controle geldt dat de bemonsterde periode zo kort mogelijk moet zijn om een betrouwbare meting te kunnen verrichten. het meetresultaat wordt dan gerelateerd aan de beschouwde periode
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Натриева основа
OEL TWA	2 mg/m <sup>3</sup> (alkaline aerosols)
Remark	• (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Croatia - Occupational Exposure Limits</b>	
Local name	Natrijev hidroksid; kaustična soda
KGVI (OEL STEL)	2 mg/m <sup>3</sup>
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 148/2023)
<b>Czech Republic - Occupational Exposure Limits</b>	
Local name	Hydroxid sodný
PEL (OEL TWA)	1 mg/m <sup>3</sup>
NPK-P (OEL C)	2 mg/m <sup>3</sup>
Remark	I - dráždí sliznice (oči, dýchací cesty) resp. kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 330/2023 Sb.)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Natriumhydroxid
OEL C	2 mg/m <sup>3</sup>
Regulatory reference	BEK nr 202 af 21/02/2023


	<b>SAFETY DATA SHEET</b>	Page : 7 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
<b>Estonia - Occupational Exposure Limits</b>	
Local name	Naatriumhüdroksiid
OEL TWA	1 mg/m <sup>3</sup>
OEL STEL	2 mg/m <sup>3</sup>
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 21.12.2022, 3)
<b>Finland - Occupational Exposure Limits</b>	
Local name	Natriumhydroksidi
HTP (OEL C)	2 mg/m <sup>3</sup>
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
<b>France - Occupational Exposure Limits</b>	
Local name	Sodium (hydroxyde de) (Hydroxyde de sodium)
VME (OEL TWA)	2 mg/m <sup>3</sup>
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 6443, 2022; Outil65)
<b>Greece - Occupational Exposure Limits</b>	
Local name	Υδροξείδιο του νατρίου
OEL TWA	2 mg/m <sup>3</sup>
OEL STEL	2 mg/m <sup>3</sup>
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
<b>Hungary - Occupational Exposure Limits</b>	
Local name	NÁTRIUM-HIDROXID
AK (OEL TWA)	1 mg/m <sup>3</sup>
CK (OEL STEL)	2 mg/m <sup>3</sup>
Remark	m (maró hatású anyag, amely felmarja a bőrt, nyálkahártyát, szemet vagy mindhármát); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Sodium hydroxide
OEL STEL	2 mg/m <sup>3</sup>
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Latvia - Occupational Exposure Limits</b>	
Local name	Nātrija hidroksīds (nātrija sārms, kaustiskā soda)
OEL TWA	0,5 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)


 <p>شركة قطر للفينيل المحدودة QATAR VINYL COMPANY LTD.</p>	<b>SAFETY DATA SHEET</b>	Page : 8 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	Natrio hidroksidas
NRV (OEL C)	2 mg/m <sup>3</sup>
Remark	Ū (ūmus poveikis)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
<b>Poland - Occupational Exposure Limits</b>	
Local name	Wodorotlenek sodu
NDS (OEL TWA)	0,5 mg/m <sup>3</sup>
NDSch (OEL STEL)	1 mg/m <sup>3</sup>
Regulatory reference	Dz. U. 2018 poz. 1286 wraz z późn. zm.
<b>Portugal - Occupational Exposure Limits</b>	
Local name	Hidróxido de sódio
OEL C	2 mg/m <sup>3</sup> 2 ppm
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Slovakia - Occupational Exposure Limits</b>	
Local name	Hydroxid sodný
NPHV (OEL TWA)	2 mg/m <sup>3</sup>
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
<b>Spain - Occupational Exposure Limits</b>	
Local name	Hidróxido de sodio
VLA-EC (OEL STEL)	2 mg/m <sup>3</sup>
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2024. INSHT
<b>Sweden - Occupational Exposure Limits</b>	
Local name	Natriumhydroxid
NGV (OEL TWA)	1 mg/m <sup>3</sup> (inhalable fraction)
KGV (OEL STEL)	2 mg/m <sup>3</sup> (inhalable fraction)
Remark	3 (Med inhalerbar fraktion menas den mängd partiklar, av totalmängden partiklar i luften, som man inandas genom näsa och mun)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Sodium hydroxide
WEL STEL (OEL STEL)	2 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE



	<b>SAFETY DATA SHEET</b>	Page : 9 / 20
		Revision nr : 1.0
	<b>Caustic Soda Solution at 50%</b>	Issue date : 27/06/2024
		Supersedes :

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
<b>Iceland - Occupational Exposure Limits</b>	
Local name	Natriumhýdroxíð (vítissóti)
OEL STEL	2 mg/m <sup>3</sup>
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
<b>Norway - Occupational Exposure Limits</b>	
Local name	Natriumhydroksid
Takverdi (OEL C)	2 mg/m <sup>3</sup>
Regulatory reference	FOR-2023-12-18-2278
<b>North Macedonia - Occupational Exposure Limits</b>	
Local name	Натриум хидроксид
OEL TWA	2 mg/m <sup>3</sup> (I) инхалабилна фракција – дел на вкупно суспендирани материји, кои работникот ги вдишува
KTV	1
Short time value [mg/m <sup>3</sup> ]	2 mg/m <sup>3</sup>
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусо време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m <sup>3</sup> или во ml/m <sup>3</sup> (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (Y)
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	Soude caustique / Natriumhydroxid [Aetznatron]
MAK (OEL TWA)	2 mg/m <sup>3</sup> (inhalable dust)
KZGW (OEL STEL)	2 mg/m <sup>3</sup> (inhalable dust)
Notation	SS <sub>c</sub> / SS <sub>c</sub>
Remark	NIOSH, OSHA
Regulatory reference	www.suva.ch, 01.01.2024
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Sodium hydroxide
ACGIH OEL C	2 mg/m <sup>3</sup>
Remark (ACGIH)	TLV <sup>®</sup> Basis: URT, eye, & skin irr
Regulatory reference	ACGIH 2024

	<b>SAFETY DATA SHEET</b>	Page : 10 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

### 8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Personal air monitoring. Room air monitoring.

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

Additional information : Recommended monitoring procedures : Personal air monitoring. Room air monitoring

### 8.1.5. Control banding

No additional information available


## 8.2. Exposure controls

Engineering measure(s)	: Provide adequate ventilation. Organisational measures to prevent/limit releases, dispersion and exposure. See Section 7 for information on safe handling. Emergency safety showers should be available in the immediate vicinity of any potential exposure. Provide eye shower and label its location conspicuously. Handle substance within a closed system. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal protective equipment	: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hand protection	: Wear chemically resistant gloves (tested to EN374) . Suitable material: The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Eye protection	: Use suitable eye protection (EN166): goggles. face shield
Body protection	: Wear suitable protective clothing. Wear suitable coveralls to prevent exposure to the skin. Use chemically protective clothing. Chemical resistant safety shoes
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140). full face mask (DIN EN 136). Filter type: The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)
Thermal hazard protection	: Not required for normal conditions of use. Use dedicated equipment.
Environmental exposure controls	: Avoid release to the environment. Comply with applicable Community environmental protection legislation.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Cloudy.

	<b>SAFETY DATA SHEET</b>	Page : 11 / 20
		Revision nr : 1.0
		Issue date : 27/06/2024
	<b>Caustic Soda Solution at 50%</b>	Supersedes :

Molecular weight	: 40,01 g/mol
Odour	: None.
Odour threshold	: No data available
Melting / freezing point	: No data available
Freezing point	: 12 °C
Initial boiling point and boiling range	: 142 – 144 °C
Flammability	: Not applicable,liquid
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not applicable.
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: 14
Kinematic viscosity	: No data available
Dynamic viscosity	: 78 mPa.s (20°C); 23 mPa.s (40°C)
Solubility	: Water: completely soluble (20°C)
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water	: Not relevant
Vapour pressure	: 2 hPa (20°C)
Vapour pressure at 50°C	: Not available
Density	: 1520 kg/m <sup>3</sup> (20°C)
Relative density	: 1,52 (Water=1)
Vapour density	: No data available
Particle characteristics	: Not applicable

## **9.2. Other information**

### **9.2.1. Information with regard to physical hazard classes**

No additional information available

### **9.2.2. Other safety characteristics**

No additional information available

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Reference to other sections: 10.4 & 10.5.

### **10.2. Chemical stability**


Stable under normal conditions.

### **10.3. Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

### **10.4. Conditions to avoid**

See Section 7 for information on safe handling.

	<h1 style="margin: 0;">SAFETY DATA SHEET</h1>	Page : 12 / 20
		Revision nr : 1.0
		Issue date : 27/06/2024
	<h2 style="margin: 0;">Caustic Soda Solution at 50%</h2>	Supersedes :

### 10.5. Incompatible materials

zinc. Aluminium. copper. Acids. Halogenated compounds. See Section 7 for information on safe handling. Alkali metals. Alkaline earth metals. Acetaldehyde. Acrolein. acrylonitrile. allyl alcohol. maleic anhydride. Bromine. Oleum. tetrahydrofuran.

### 10.6. Hazardous decomposition products

Reference to other sections 5.2. At high temperatures : Attacks many metals forming flammable/explosive gas (HYDROGEN!).

## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	: Causes severe skin burns. pH: 14


sodium hydroxide; caustic soda (1310-73-2)	
pH	12 (conc: 0.05 % (solution))

Serious eye damage/irritation	: Causes serious eye damage. pH: 14
-------------------------------	--

sodium hydroxide; caustic soda (1310-73-2)	
pH	12 (conc: 0.05 % (solution))

Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

Caustic Soda Solution at 50% (1310-73-2)	
Kinematic viscosity	No data available

	<b>SAFETY DATA SHEET</b>	Page : 13 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
Kinematic viscosity	Not applicable

### **11.2. Information on other hazards**

#### **11.2.1. Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties : The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

#### **11.2.2. Other information**

Other information : Symptoms related to the physical, chemical and toxicological characteristics, For further information see section 4

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

Environmental properties : According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
LC50 - Fish [1]	45,4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static] Source: IUCLID)
NOEC (chronic)	> 25 mg/l

### **12.2. Persistence and degradability**


<b>Caustic Soda Solution at 50% (1310-73-2)</b>	
Persistence and degradability	No additional information available.

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
Persistence and degradability	Not applicable.

### **12.3. Bioaccumulative potential**

<b>Caustic Soda Solution at 50% (1310-73-2)</b>	
Partition coefficient n-octanol/water	Not relevant
Bioaccumulative potential	No additional information available.

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
Partition coefficient n-octanol/water	-3,88

	<b>SAFETY DATA SHEET</b>	Page : 14 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

<b>sodium hydroxide; caustic soda (1310-73-2)</b>	
Bioaccumulative potential	Low potential.

#### **12.4. Mobility in soil**

<b>Caustic Soda Solution at 50% (1310-73-2)</b>	
Mobility in soil	No data available

#### **12.5. Results of PBT and vPvB assessment**

<b>Caustic Soda Solution at 50% (1310-73-2)</b>	
Results of PBT assessment	Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

#### **12.6. Endocrine disrupting properties**

Adverse effects on the environment caused by endocrine disrupting properties : The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

#### **12.7. Other adverse effects**

Other adverse effects : No data available.

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**


Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.






European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

### **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
1824	1824	1824	1824	1824
<b>14.2. UN proper shipping name</b>				
SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	Sodium hydroxide solution	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION
<b>Transport document description</b>				
UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II, (E)	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II	UN 1824 Sodium hydroxide solution, 8, II	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

	<b>SAFETY DATA SHEET</b>	Page : 15 / 20
		Revision nr : 1.0
	<b>Caustic Soda Solution at 50%</b>	Issue date : 27/06/2024
		Supersedes :

ADR	IMDG	IATA	ADN	RID
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

**14.6. Special precautions for user**

Special precautions for user : No data available

**- Overland transport**


Classification code (ADR) : C5  
 Limited quantities (ADR) : 1I  
 Excepted quantities (ADR) : E2  
 Packing instructions (ADR) : P001, IBC02  
 Mixed packing provisions (ADR) : MP15  
 Portable tank and bulk container instructions (ADR) : T7  
 Portable tank and bulk container special provisions (ADR) : TP2  
 Tank code (ADR) : L4BN  
 Vehicle for tank carriage : AT  
 Transport category (ADR) : 2  
 Hazard identification number (Kemler No.) : 80  
 Orange plates : 

<b>80</b>
<b>1824</b>

  
 Tunnel restriction code : E  
 EAC code : 2R

**- Transport by sea**

Limited quantities (IMDG) : 1 L  
 Excepted quantities (IMDG) : E2  
 Packing instructions (IMDG) : P001  
 IBC packing instructions (IMDG) : IBC02  
 Tank instructions (IMDG) : T7  
 Tank special provisions (IMDG) : TP2  
 EmS-No. (Fire) : F-A

	<b>SAFETY DATA SHEET</b>	Page : 16 / 20
		Revision nr : 1.0
		Issue date : 27/06/2024
	<b>Caustic Soda Solution at 50%</b>	Supersedes :

EmS-No. (Spillage) : S-B  
 Stowage category (IMDG) : A  
 Segregation (IMDG) : SGG18, SG35  
 Properties and observations (IMDG) : Colourless liquid. Corrosive to aluminium, zinc and tin. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.

**- Air transport**

PCA Excepted quantities (IATA) : E2  
 PCA Limited quantities (IATA) : Y840  
 PCA limited quantity max net quantity (IATA) : 0.5L  
 PCA packing instructions (IATA) : 851  
 PCA max net quantity (IATA) : 1L  
 CAO packing instructions (IATA) : 855  
 CAO max net quantity (IATA) : 30L  
 Special provisions (IATA) : A3, A803  
 ERG code (IATA) : 8L

**- Inland waterway transport**

Classification code (ADN) : C5  
 Limited quantities (ADN) : 1 L  
 Excepted quantities (ADN) : E2  
 Carriage permitted (ADN) : T  
 Equipment required (ADN) : PP, EP  
 Number of blue cones/lights (ADN) : 0


**- Rail transport**

Classification code (RID) : C5  
 Limited quantities (RID) : 1L  
 Excepted quantities (RID) : E2  
 Packing instructions (RID) : P001, IBC02  
 Mixed packing provisions (RID) : MP15  
 Portable tank and bulk container instructions (RID) : T7  
 Portable tank and bulk container special provisions (RID) : TP2  
 Tank codes for RID tanks (RID) : L4BN  
 Special provisions for RID tanks (RID) : TU42  
 Transport category (RID) : 2  
 Colis express (express parcels) (RID) : CE6  
 Hazard identification number (RID) : 80

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

Code: IBC : No data available.



	<b>SAFETY DATA SHEET</b>	Page : 17 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Caustic Soda Solution at 50%	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

##### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

##### Ozone Regulation (EU 1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

##### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

##### Explosives Precursors Regulation (2019/1148)


Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

##### Detergent Regulation (648/2004/EC): Labelling of contents

#### 15.1.2. National regulations

	<b>SAFETY DATA SHEET</b>	Page : 18 / 20
		Revision nr : 1.0
	<b>Caustic Soda Solution at 50%</b>	Issue date : 27/06/2024
		Supersedes :

#### France

Installations classées			
No ICPE	Désignation de la rubrique	Code Régime	Rayon
1630.text	Soude ou potasse caustique (emploi ou stockage de lessives de).		
1630.1	Le liquide renfermant plus de 20 % en poids d'hydroxyde de sodium ou de potassium. La quantité totale susceptible d'être présente dans l'installation étant : 1. Supérieure à 250 t	A	1
1630.2	Le liquide renfermant plus de 20 % en poids d'hydroxyde de sodium ou de potassium. La quantité totale susceptible d'être présente dans l'installation étant : 2. Supérieure à 100 t, mais inférieure ou égale à 250 t	D	

#### Germany

Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK)	: WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 142).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

#### Netherlands

Waterbezwaarlijkheid	: B (4) - Weinig schadelijk voor in het water levende organismen
SZW-lijst van kankerverwekkende stoffen	: The substance is not listed
SZW-lijst van mutagene stoffen	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: The substance is not listed

#### Denmark

MAL code	: 00-3 (Executive Order No. 301 from 1993)
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product

#### 15.2. Chemical safety assessment

Not applicable.

### SECTION 16: Other information

Abbreviations and acronyms:

	ABM = Algemene beoordelingsmethodiek
--	--------------------------------------



# SAFETY DATA SHEET

Page : 19 / 20

Revision nr : 1.0

Issue date : 27/06/2024

## Caustic Soda Solution at 50%

Supersedes :


ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
BTT = Breakthrough time (maximum wearing time)
DMEL = Derived Minimal Effect level
DNEL = Derived No Effect Level
EC50 = Median Effective Concentration
EL50 = Median effective level
ErC50 = EC50 in terms of reduction of growth rate
ErL50 = EL50 in terms of reduction of growth rate
EWC = European waste catalogue
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = Median lethal level
NA = Not applicable
NOEC = No observed effect concentration
NOEL: no-observed-effect level
NOELR = No observed effect loading rate
NOAEC = No observed adverse effect concentration
NOAEL = No observed adverse effect level
N.O.S. = Not Otherwise Specified
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
PNEC = Predicted No Effect Concentration
Quantitative structure-activity relationship (QSAR)
STOT = Specific Target Organ Toxicity
TWA = time weighted average
VOC = Volatile organic compounds
WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the : ECHA (European Chemicals Agency). SDS LOLI eChemPortal. Supplier SDS. datasheet

Other information : For any further details or query please contact us at: [stewardship@qapco.com.qa](mailto:stewardship@qapco.com.qa).

Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B

	<b>SAFETY DATA SHEET</b>	Page : 20 / 20
	<b>Caustic Soda Solution at 50%</b>	Revision nr : 1.0
		Issue date : 27/06/2024
		Supersedes :

Skin Irrit. 2	Skin corrosion/irritation, Category 2
---------------	---------------------------------------

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878  
 Classification according to Regulation (EC) No. 1272/2008 [CLP]  
 Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.