

ANWIL S.A. we Włocławku	TECHNICAL DATA SHEET	Number sheet
	Sodium hydroxide solution (NaOH)	53 A ST/05/2018

## 1. PRODUCT NAME

### SODIUM HYDROXIDE SOLUTION

a) Trade name	Caustic soda liquid
b) Systematic name	Sodium hydroxide
c) Systematic name In English	Sodium hydroxide
In German	Natronlauge

## 2. IDENTIFICATION

2.1. Purity	- commercially pure
2.2 Form	- liquid or solid
2.3 Chemical formula	- NaOH
2.4 Molecular weight	- 39,997
2.5 CAS No	- 1310-73-2
2.6 EINECS No	- 215-185-5

## 3. GENERAL PROPERTIES

3.1 Sodium hydroxide solution – substance with caustic properties, absorbing carbon dioxide from air, that results in formation of sodium carbonate. Temperature depressing may cause crystallization of NaCl from solution.

## 4. GENERAL REQUIREMENTS

4.1 Sodium hydroxide solution: transparent liquid colourless.

5. TECHNICAL REQUIREMENTS – in accordance with Table 1.

Table 1

No	Requirements	Sodium hydroxide solution			Testing method according to
		22 %	30 %	50 %	
1	Sodium hydroxide, (NaOH) % (m/m)	21 ÷ 23	30 ÷ 33	49 ÷ 51	ISO 979
2	Sodium chloride, (NaCl) % (m/m), not more than	0,006 <sup>1)</sup>	0,01 <sup>1)</sup>	0,02 <sup>1)</sup>	EN 896 B.2 <sup>2)</sup>
3	Sodium carbonate, (Na <sub>2</sub> CO <sub>3</sub> ), % (m/m), not more than	0,1 <sup>1)</sup>	0,2 <sup>1)</sup>	0,2 <sup>1)</sup>	ISO 3196
4	Sodium (V) chlorate (NaClO <sub>3</sub> ), % (m/m), not more than	0,002 <sup>1)</sup>	0,003 <sup>1)</sup>	0,005 <sup>1)</sup>	EN 896 B.2
5	Iron (Fe), mg/kg, not more than	5 <sup>1)</sup>	5 <sup>1)</sup>	5 <sup>1)</sup>	EN 896 B.2 <sup>3)</sup>
6	Colour in Hazen unit (Pt-Co), mgPt/dm <sup>3</sup> , not more than	-	10 <sup>1)</sup>	10 <sup>1)</sup>	PN-C-04534/02:1981 <sup>1)</sup>

<sup>1)</sup> Guaranteed value, determination made in case of complaint.  
<sup>2)</sup> Determination method - the same as for chlorates.  
<sup>3)</sup> Determination method - the same as for metals

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## 6. APPLICATION - chemical raw material

7. **SAMPLING AND SAMPLE PREPARATION FOR TESTING** – in accordance with PN-EN 896:2013 p.5.1.

## 8. PRODUCT LOT QUANTITY

8.1 Sodium hydroxide solution lot is the content of one railway tank car or tank truck.

## 9. PACKING

Railway tank cars of code L4BN (or higher code according to RID regulations, it 4.3.4) made of stainless steel or carbon steel covered with rubber coating

Tank trucks of code L4BN (or higher code according to ADR regulations, it 4.3.4) made of stainless steel or carbon steel

Railway tank cars/tank trucks must be provided with heating coils or should be thermally isolated, to prevent sodium hydroxide solution from freezing.

**NOTE 1:** Seller is responsible for the cleanness of tank trucks which are dispatched on the franco basis. The Buyer is responsible for the cleanness of tank trucks which are dispatched on the loco basis. The owner of tank trucks or leaseholder is responsible for the cleanness of rail tank cars.

## 10. STORAGE

Sodium hydroxide solution – in special tanks provided with a suitable chemically lining and a heating system or a system maintaining indoor temperature at a level preventing the stored solution from freezing.

### **NO STORING WITH OTHER MATERIAL GROUPS**

## 11. TRANSPORT

11.1 Sodium hydroxide solution should be transported in packings in accordance with point 9.


11.2 Material classification

ADR	UN 1824	Proper shipping name: Sodium hydroxide solution	Packing group: II	Class No: 8
RID	UN 1824	Proper shipping name: Sodium hydroxide solution	Packing group: II	Class No: 8
IMGD	UN 1824	Proper shipping name: Sodium hydroxide solution	Packing group: II	Class No: 8

## 12. QUALITY CERTIFICATE AND EXPIRY DATE

The manufacturer shall provide the quality certificate with the test results for each rail tank car of sodium hydroxide solution or each tank truck of sodium hydroxide solution.

Expiry date for sodium hydroxide solution, in undamaged containers and when requirements defined in points 9, 10 and 11 are observed, during the time when product keeps quality requirements according to point 4 and 5, is equal to half a year.

Approved by  
DYREKTOR ds. PRODUKCJI  
TWORZYW SZTUCZNYCH  
  
Tadeusz Malinowski

The information in this data sheet is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation. It does not imply the acceptance of any legal liability or responsibility whatsoever by the Company for the consequences of its use or misuse in any particular circumstances.

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