

SODIUM HYDROXIDE

PRODUCTION:

Sodium hydroxide is produced via chlor-alkali process. This involves the elektrolysis of an aqueous solution of sodium chloride, with mercury cell process. Sodium ions are reduced to sodium metal ion, which forms an amalgam with a mercury cathode; this sodium is then reacted with water to produce NaOH.

DESCRIPTION:

Sodium hydroxid is colourless liquid easily soluble in wather, in witch case it releases a significant quantity of hydration heat.

SPECIFIED PROPERTIES:

No.	PROPERTY	TEST METHOD	UNIT	VALUE
1.	Appearance	SRPS H.B1.031	-	colourless liquid
2.	Sodium hydroxide content	SRPS H.B8.661	% (m/m)	min 45
3.	Sodium carbonate content	SRPS H.B8.663	% (m/m)	max 0.3
4.	Sodium chloride content	SRPS H.B8.680	% (m/m)	max 0,05
5.	Sodium sulphate content	SRPS H.B8.666	% (m/m)	max 0.02
6.	Silicium dioxide content	SRPS H.B8.667	ppm (m/m)	max 100
7.	Aluminium oxide content	SRPS H.B8.682	ppm (m/m)	max 10
8.	Calcium oxide content	SRPS H.B8.672	ppm (m/m)	max 10
9.	Magnesium oxide content	SRPS H.B8.672	ppm (m/m)	max 5
10.	Iron content	SRPS H.B8.670	ppm (m/m)	max 5
11.	Manganese content	SRPS H.B8.675	ppm (m/m)	max 5
12.	Mercury content	SRPS H.B8.678	ppm (m/m)	max 1
13.	Copper content	MA0745-UP020	ppm (m/m)	max 0.5
14.	Nickel content	SRPS H.B8.676	ppm (m/m)	max 1

*SRPS- National Standard Method **MA - HIPP's Internal Method

The values given in the table are specified and used only as information.



APPLICATION:

Sodium hydroxid has wide scope of applications in both organic and inorganic industries. It is used for the production of sodium salts, glass, ceramics, detergents, soap, cellulose, organic paints, varnish, silk, for petroleum refining, rubber regeneration, in the textile industry, for artificial perfumes, in the rubber industry, for industrial water preparation for steam boilers, etc.

STORAGE:

The solution of sodium hydroxid is stored in cylindrically shaped tanks, hermetically closed, made of black carbon steel. The insade tanks walls are covered with rubber. The installed heaters maintain the sodium hydroxid temperature at 50-55 ${}^{0}C$.

TRANSPORTATION:

Sodium hydroxide is transported by road and reil tank cars, witch are subject to stringent requirements prescribed for agresive material transportation. Tank cars must have the appropriate barriers witch decrease the kinetic energy during movements, as well as heating jacket or spiral heaters, for heating in the case of crystalization. These tank cars are standardized and filling level is limited in order to provide safe transportation.

REACH:

"HIP Petrohemija"a.d. Pancevo, Serbia, with applying the existing standards ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 folows completely the highest standards by wich there are regulated human health and safety protection and environmental protection and herewith expresses its intention to meet all the requirements wich are prescribed by REACH regulation.

Registration of all the substances of potential export interest has been made with European Agency for Chemicals in Helsinki, in accordance with the prescribed deadlines, therefore in this way it enables further undisturbed placement and sale of "HIP Petrohemija" a.d. products without any limits at EU Market.

As the only representative for "HIP Petrohemija"a.d. in EU, pursuant to Article 8.of REACH regulation, there has been designated REACHLaw Ltd., Helsinki, Finland.

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