Chemical Name: Molecular formula: NaOH
No. CAS 1310-73-2
Abbreviation: Caustic Soda

General Description:
Caustic soda solid is obtained from sodium hydroxide - technical grade, by electrolytic process. It is a solid white, hygroscopic, odorless substance.

Caustic soda solid easily dissolves in water, with heat release. The product is soluble in methyl and ethyl alcohols.

Sodium hydroxide is a strong electrolyte (completely ionized both in crystalline and solution states). Sodium hydroxide is not volatile, but it rises easily in air as aerosols. It is insoluble in ethyl ether.

Technical Quality Conditions:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>MU</th>
<th>Values</th>
<th>Test methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide (NaOH), min.</td>
<td>%</td>
<td>98</td>
<td>STAS 3068</td>
</tr>
<tr>
<td>Sodium carbonate (Na₂CO₃), max.</td>
<td>%</td>
<td>0.5</td>
<td>STAS 3068</td>
</tr>
<tr>
<td>Sodium chloride (NaCl), max</td>
<td>%</td>
<td>0.15</td>
<td>STAS 3068</td>
</tr>
<tr>
<td>Iron oxides (Fe₂O₃), max.</td>
<td>%</td>
<td>0.01</td>
<td>STAS 3068</td>
</tr>
</tbody>
</table>

Specific Properties:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>strongly alkaline</td>
</tr>
<tr>
<td>Boiling point</td>
<td>1390°C</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>not ignitable</td>
</tr>
<tr>
<td>Relative density (water=1)</td>
<td>2.13 at 25°C</td>
</tr>
<tr>
<td>Melting point</td>
<td>318°C</td>
</tr>
</tbody>
</table>

The values of those characteristics are approximated, and are only for general information and are not part of the technical quality conditions.

Main Applications:

- petroleum industry
  (petroleum products refining)
- chemical industry (dyes, water treatment);
- pulp and paper industry
  (wood treatment);
- textile industry;
- metallurgy industry (alumina);
- soap and detergents industry.
Shipping Information:

- un-painted drums made of 0.5 mm corrugated or plate sheets, with maximum capacity of 400 kg net (max. permissible variation ± 4 kg).
- for road export delivery, if necessary, OLTCHIM performs painting and marking of the drums

Storage:

Keep the product in tightly closed and properly labeled containers. Do not store caustic soda solid in aluminum container as flammable hydrogen gas can be produced.

Caustic soda solid should be stored under dry and cold spaces well-ventilated in order to avoid dust forming and spreading.

Never store caustic soda solid together with other group of materials such as: acids and ammonium salts.

Safety Considerations:

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations.

Warning:

Caustic soda solid is highly corrosive hazardous product.

Avoid body contact. It is dangerous to eyes and skin. Destroys skin tissues and causes severe chemical burns. Inhalation of dust/mist can cause serious injury to respiratory tract. Ingestion can injure the digestive system.

Attention:

Information contained in this document is provided to the best of our knowledge and experience.

Please contact OLTCHIM to see if the document has been revised.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.