

## Caustic Soda Pearls

### Product identification

Chemical Name:		Sodium Hydroxide Solid	
Common Name:		Caustic Soda Pearls/Beads/Prills/Pellets	
Molecular Formula:	NaOH	MolecularWeight:	40.0
CAS No.:	1310-73-2	UN No.:	1823
Dangerous Classification:	8	Packaging Group:	II

### Physical properties

Meting point	320-325	°C
Boiling point	1385-1390	°C
Density at 25°C	1.15	kg/dm <sup>3</sup>
Solution rate: (100g in 100ml water at 25°C	22	s
Heat capacity at 25°C	2.01	J/g.K
Heat of Fusion at 15°C	167.5	J/g
Standard Heat of Formation at 25°C	10.67	kJ/g

White color pearls with strong corrosion. It is very easy to attract moisture and dissolved in moisture of atmosphere, reacts with carbon dioxide in the air to form sodium carbonate.

### Specifications: (0.001%=10ppm)

#### Industrial Grade

Standard Specification	Typical Data			
	99.0	%	Min	99.1%
Purity	99.0	%	Min	99.1%
Sodium Carbonate (Na <sub>2</sub> CO <sub>3</sub> ):	0.8	%	Max	0.5%
Sodium Chloride (NaCl) :	0.1	%	Max	0.03%
Iron(Fe)	50	ppm	Max	7ppm

**Particle Distribution**
**Particle I (Micropearls): Diameter is from 0.3 to 1.0mm**

Mesh	Weight% On Screen
10 mesh	0
20 mesh	2
30 mesh	22
40 mesh	67
50 mesh	7
Thru 60 mesh	<1

**1. Particle II (Normal): Diameter is from 0.7 to 1.5mm**

Mesh	Weight% On Screen
10 mesh	0
20 mesh	13
30 mesh	82
40 mesh	3
Thru 60 mesh	<1

**2. Particle III (Superprills): Diameter is from 1.5 to 3.0mm**

Mesh	Weight% On Screen
10 mesh	13
20 mesh	86
Thru 20 mesh	<1

**Packaging & Loading**

Stacked on pallet

Available Packagings	Units Per Pallet	Units Per Container	Max Loadage
25kg PP woven bag	48 bags	960 bags	24 tons
25kg Kraft paper bag	48 bags	960 bags	24 tons
25kg Polythene bag	48 bags	960 bags	24 tons
25kg Paper laminated PP bag	48 bags	960 bags	24 tons
500kg Big bag	2 bags	40 bags	20 tons
1000kg Big bag	2 bags	40 bags	20 tons
1100kg Big bag	2 bags	40 bags	20 tons

50kg Iron drum	18 drums	360 drums	18 tons
230kg Iron drum	4 drums	80 drums	18.4 tons
50kg Plastic drum	18 drums	360 drums	18 tons
250kg Plastic drum	4 drums	80 drums	20 tons
50lb PP woven bag	44 bags	880 bags	44000 lbs
50lb Kraft paper bag	44 bags	880 bags	44000 lbs
50lb Polythene bag	44 bags	880 bags	44000 lbs
50lb Paper laminated PP bag	44 bags	880 bags	44000 lbs
2000lb Super sack	2 sacks	20 sacks	40000 lbs
100lb Iron drum	18 drums	360 drums	36000 lbs
500lb Iron drum	4 drums	80 drums	40000 lbs
100lb Plastic drum	18 drums	360 drums	36000 lbs
500lb Plastic drum	4 drums	80 drums	40000 lbs

Loose laded in container:

Available Packagings	Units Per Container	Max Loadage
25kg PP woven bag	1080bags	27 tons
25kg Kraft paper bag	1080bags	27 tons
25kg Polythene bag	1080bags	27 tons
25kg Paper laminated PP bag	1080bags	27 tons
500kg Big bag	50 bags	25 tons
1000kg Big bag	30 bags	30 tons
1100kg Big bag	30 bags	33 tons
50kg Iron drum	480 drums	24 tons
230kg Iron drum	88 drums	20.24 tons
50kg Plastic drum	480 drums	24 tons
250kg Plastic drum	88 drums	22 tons
50lb PP woven bag	1160 bags	58000 lbs
50lb Kraft paper bag	1160 bags	58000 lbs
50lb Polythene bag	1160 bags	58000 lbs
50lb Paper laminated PP bag	1160 bags	58000 lbs
2000lb Super sack	30 sacks	60000 lbs
100lb Iron drum	480 drums	48000 lbs
500lb Iron drum	88 drums	44000 lbs
100lb Plastic drum	480 drums	48000 lbs
500lb Plastic drum	88 drums	44000 lbs



## Application

Used as a raw material in the manufacture of soaps, detergents, textiles and paper. Also, in water softening and treatment, drilling mud in oil field, refining petroleum products, in sanitation, hygiene and production chemicals. In food and drug industry, it is used as acidity regulator, alkali, impregnant's pigment.

## Potential acute health effects

Very hazardous in case of skin contact (corrosive, irritant, permeating), of eye contact (irritant, corrosive), of ingestion, of inhalation. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or occasionally blistering.

## Personal protection

Suggested to wear full suit, splash goggles, dust respirator, boots and gloves. Consult a specialist BEFORE handling this product. In case of eyes contacted, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately. In case of skin contacted, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

## Transportation and storage

Caustic soda pearls must be stored in steel drum or other well-sealed packaging, thickness of packaging must be more than 0.5 mm, compression resistance of packaging must more than 0.5Pa. All packaging must be printed "Corrosive" symbol. Keep container tightly closed and in a cool, well-ventilated area. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from incompatibles such as oxidizers, reducing agents, metals, acids, alkalis, moisture. In case of burning, use water, sand or fire extinguisher to put out fire, however, please pay attention to the corrosive liquid when caustic soda pearls are solved in water.