

SOLID CAUSTIC SODA MICROPEARLS

PDS-1122-0001

Solid caustic soda is manufactured by evaporation of water from liquid caustic soda and then solidification into a required shape.

Solid caustic soda is a strong base used as chemical reagent, pH-regulating, ion exchanger regenerating agent, catalyst, etching or cleaning agent. Solid caustic soda micropearls are white odourless solids.

The characteristics of solid caustic soda micropearls are in compliance with the monograph of the Food Chemicals Codex 5th edition as well as the purity criteria E524 laid down in the directive 2000/63/EC.

Some applications of this product may be regulated or restricted by national or international standards (e.g. for food additives, water treatment, the pharmaceutical industry, etc). The buyer and the eventual user, in his sole and entire liability, shall respect those standards, orders of any relevant authority, and all existing patents and intellectual properties rights; and shall comply with the laws and the regulations applicable to our products and/or to his activity. The buyer and the eventual user must independently determine the suitability of this product for any particular purpose and its manner of use.

Please contact us for further information on grades developed for a specific end-use.

Plant

Tavaux (France).

Standard specification

Product characteristics

| Content | Unit | Value | Method of analysis ⁽¹⁾ |
|---|-------|---------|---|
| Total alkalinity (NaOH) | g/kg | ≥ 990 | Titrimetry (ISO 979 / FCC V) |
| Sodium carbonate (Na ₂ CO ₃) | g/kg | ≤ 4 | Titrimetry (ISO 3196 / FCC V) |
| Sulphate (SO ₄) | mg/kg | ≤ 40 | Ion chromatography (ASTM E1787) |
| Chloride (Cl) | mg/kg | ≤ 40 | Ion chromatography (ASTM E1787) |
| Iron (Fe) | mg/kg | ≤ 10 | Photometry (ISO 6685) |
| Arsenic (As) | mg/kg | ≤ 3 | ICP-AES** (ISO 11885) or colorimetry (FCC V) |
| Lead (Pb) | mg/kg | ≤ 0,5 | (**) Inductively coupled plasma atomic emission spectroscopy |
| Mercury (Hg) | mg/kg | ≤ 0,05 | Flameless atomic absorption spectrometry (ISO 5993 / FCC V) |
| Heavy metals* (Pb) (* H ₂ S Group) | mg/kg | ≤ 20 | ICP-AES** (ISO 11885) or precipitation test (ANA-1120-0002) (**) Inductively coupled plasma atomic emission spectroscopy |
| Insoluble substances and organic matter | | Conform | Visual test (FCC V) |
| Food Chemicals Codex 5th edition (Monograph) | | Conform | |
| Commission Directive 2000/63/EC (Purity criteria E 524) laying down specific purity criteria on food additives other than colours and sweeteners | | Conform | |

(1) The product is analysed with the mentioned methods or with local methods depending on laboratory equipments.

Packaging characteristics

Bulk.

In 25 kg PE bags on 1225 kg pallet with film.

In 500 kg bulk-bags with PE liner with or without emptying sleeve on 1000 kg pallet.

In 1000 kg bulk-bag with PE liner with or without emptying sleeve on pallet.

Please contact us for further information on product characteristics (methods of analysis, etc) and packaging characteristics (description of bags, etc).

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Identification

| | |
|---------------------|--------------|
| Sodium Hydroxide | NaOH |
| Molecular weight | 40,01 |
| CAS Number | 1310-73-2 |
| ID Number (Annex 1) | 011-002-00-6 |
| EC Number (EINECS) | 215-185-5 |

Physical and chemical characteristics

| Characteristic | Unit | Value |
|---------------------------------------|--------------------|--------|
| Mean diameter | mm | ~ 0,75 |
| Density (at 20 °C) | kg/dm ³ | 2,13 |
| Apparent density (at 20 °C) | kg/dm ³ | ~ 1,14 |
| Melting point (under 101,3 kPa) | °C | 318,4 |
| Melting heat (under 101,3 kPa) | J/g | 167,5 |
| Specific heat (at 20 °C) | kJ/kg °C | 2,01 |
| Standard heat of formation (at 25 °C) | kJ/g | 10,67 |

Storage

- Solid caustic soda must be stored in compliance with relevant laws and regulations.
- Pallets should be stored in dry areas and stacked not higher than two layers. Bags and bulk-bags must not be exposed to sun, light, humidity and rain.
- Solid caustic soda should be used as per first-in first-out principle. As far as packed micropearls are concerned, recommended shelf life is two years, from packaging date (printed on each bag or bulk-bag).
- Solid caustic soda must be disposed of in compliance with relevant laws and regulations. In case of accidental release, small product quantities could be carefully diluted with water and then neutralized with an acid.

Please contact us for further information on product handling and storage.

Safety

- Solid caustic soda is a **corrosive** product. It rapidly causes burns of the mucous membranes, eyes and skin.
- Solid caustic soda reacts violently with water and acids while releasing heat. In contact with some metals, it releases hydrogen.
- Solid caustic soda should be handled by personnel who have received adequate safety training and have been provided with adequate **individual protective equipments** (gloves, goggles, etc).
- Handling of solid caustic soda should be accompanied by **collective protective** measures (clearly signalled showers and eye baths in the vicinity).

Please consult our safety data sheet.

Transport information

| | |
|-------------------------|-------------|
| UN number | 1823 |
| ADR/ADNR/RID/IMDG class | 8 |
| Packing group | II |
| Hazard label | 8 |
| Placard | 80/1823 |

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