



SODIUM PERBORATE TETRAHYDRATE

1. IDENTIFICATION OF THE PRODUCT:

Trade name:	SODIUM PERBORATE TETRAHYDRATE
Substance name:	PERBORIC ACID, SODIUM SALT, TETRAHYDRATE
IUPAC name:	Sodium perborate
Molecular formula:	$\text{NaBO}_2(\text{OH})_2 \times 3\text{H}_2\text{O}$
Molecular Mass:	153,9 g/mol
CAS No.:	10486-00-7 (11138-47-9)*
EINECS No.:	234-390-0

Description

Sodium perborate is an inorganic peroxide which is produced in the tetrahydrate form. Sodium perborate tetrahydrate is a white, free-flowing, crystalline powder. It is well soluble in water giving an alkaline solution with oxidising properties.

2. COMPOSITION:

Parameter	CAS No.	EC No.	Name	Range
Constituent	10486-00-7 11138-47-9	234-390-0	Sodium perborate tetrahydrate, Perboric acid, sodium salt	> 95,0 %
Impurities	1330-43-4	215-540-4	Disodium tetraborate	< 2,0 %
Additives (stabilizer)	7487-88-9	231-298-2	Magnesium sulphate	< 1,0 %

Remark - Composition for impurity Disodium tetraborate, anhydrous:

Disodium tetraborate EC No. 215-540-4, CAS No.: 1330-43-4 is on the Candidate list of SVHC for the inclusion in Annex XIV (Decision number ED/30/2010); this implies obligations to producers, importers and suppliers to safeguard and report safe use conditions when the substance is contained in articles or mixtures at concentrations above 0.1 % (w/w).

Classification & Labelling:

According to Regulation (EC) 1272/2008, Annex VI.

Name: Perboric acid, sodium salt, tetrahydrate, containing $\geq 0,1$ % (w/w) of particles with an aerodynamic diameter of below 50 μm

3. USE OF THE PRODUCT:

Sodium perborate tetrahydrate is an important ingredient of washing powders, laundry detergent powders, bleaching additives and dishware detergent powders. It is utilized alone or in combination with sodium perborate monohydrate it is also used for formulating compact laundry detergent powders, laundry detergent tablets and dishware detergent tablets.

The firmness and stability of sodium perborate tetrahydrate allow for preparation of stable powder mixtures. Besides being a bleaching agent, sodium perborate tetrahydrate also provides bactericidal activity, odour removal from the washing water, stability in combination with numerous ingredients of washing powders and alkalinity that reduces water hardness.

Sodium perborate tetrahydrate is efficient at temperatures above 60 °C. Its efficiency is boosted at lower temperatures with the addition of TAED activator that provides for *in situ* formation of peracetic acid with powerful oxidative and disinfection action.

Because of its bleaching, oxidising and disinfective properties it is used by the chemical, textile and cosmetics industry as well.

4. OTHER INFORMATION:**Packaging:**

Sodium perborate tetrahydrate is delivered in the following packaging units:

- 25 PE Bags
- 500 kg Flexible IBC (PP big-bag)
- 1.000 kg Flexible IBC (PP big-bag)
- Bulk

Storage and handling

Sodium perborate tetrahydrate should be stored in its original packaging in a cool, dry place (T below 40 °C). The product must not be exposed to sunlight or kept near a source of heat. Water, moisture, heat and catalysts cause decomposition during which oxygen is formed and the product loses its activity. If stored under the conditions described, it is stable and the loss of active oxygen is minimal (1-2 % per year).

If pneumatic transport is used, the conveying air should be clean and dry. We recommend the following parameters:

Air temperature max. 30 °C
Relative Humidity max. 50 %
(measured at maximum operating pressure)

Screw and belt conveyors may also be used to transport the material over short distances.

Sodium perborate tetrahydrate dust is irritating to the eyes, mucous membranes, and respiratory tract. Use protective clothing and equipment when handling the material (mask, glasses). In case of eye contact, flush eyes with plenty of water. If swallowed, rinse mouth with water and drink plenty of water.

When handling Sodium perborate tetrahydrate local and International regulations should be taken into account.

For additional information kindly contact our Product Technical Service.

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