

PRODUCT INFORMATION SHEET 产品资料单

Sodium Perborate Tetrahydrate

Description

Sodium perborate usually exists in two forms, tetrahydrated and monohydrated. Sodium perborate tetrahydrate is obtained by addition of hydrogen peroxide to a sodium metaborate solution at a temperature close to 20.degree. C. Sodium perborate monohydrate is produced by dehydrating sodium perborate tetrahydrate in a fluid bed with heated air. Sodium perborate releases nascent oxygen at elevated temperatures, and so acts as a hydrogen peroxide bleach. The monohydrated form is essentially showing three advantages in comparison with the tetrahydrated form: a higher content of available oxygen, a higher heat stability and a higher dissolution rate into water. Sodium perborate has been in detergent and personal care formulations for many years. Its oxidative power improves the cleaning, bleaching, stain removal and deodorizing performance of powder detergent formulations, all fabric dry bleaches, denture cleaners, automatic dishwasher detergents and various institutional and industrial laundry products. It's main disadvantage is that the bleaching action only takes place at elevated temperatures. To release it's bleaching action at lower temperatures, an activator must be added.

Technical Information

Synonyms: Sodium peroxyborate, sodium peroxoborate, PBS4, PBST

Molecular Formula: $\text{NaBO}_3 \cdot 4\text{H}_2\text{O}$

Molecular Weight: 153.88

CAS编号: 10486-00-7

Product Properties Standard Specifications

Test 测试项目	Specification 规格	Result 检测结果
Appearance 外观	White crystalline granules, free-flowing 白色结晶颗粒, 自由流动	pass
Active Oxygen 活性氧, %	≥ 10.0	10.25
Bulk Density 堆积密度, g/l	550-850	660
Wet Stability 湿稳定性, %	≥ 82	90.68
PH Test (30G/L)	9.9-10.9	10.27
Ferric 铁, ppm	≤ 20	5.3

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Applications

Sodium Perborate Tetrahydrate is similar to sodium percarbonate as a famous oxygen bleach agent. It offers many of the functional benefits as liquid hydrogen peroxide in a stable solid form. Its oxidative power improves the cleaning, bleaching, stain removal and deodorizing performance of powder detergent formulations, all fabric dry bleaches, denture cleaners, automatic dishwasher detergents and various institutional and industrial laundry products.

Handling and Storage

Storage

- ④ Oxidizer. Store in a cool, well ventilated area away from all source of ignition and out of direct sunlight. Store in a dry location away from heat. Store at temperatures less than 40 °C.
- ④ Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers.
- ④ Protect from moisture. Do not store near combustible materials. Keep containers well sealed, seal only with original vent cap. Ensure pressure relief and adequate ventilation.
- ④ Store separately from organics and reducing materials. Avoid contamination which may lead to decomposition.

Handling

- ④ Avoid contact with eyes, skin, and clothing. Use with adequate ventilation.
- ④ Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area.
- ④ Prevent contact with combustible or organic materials
- ④ Label containers and keep them tightly closed when not in use.
- ④ Wash thoroughly after handling.

First-aid Measures

- ④ **Inhalation**—Remove affected person to fresh air. Seek medical attention if effects persist.
- ④ **Eye contact**—Flush eyes with running water for at least 15 minutes with eyelids held open. Seek specialist advice.
- ④ **Skin contact**—Wash affected skin with soap and mild detergent and large amounts of water.
- ④ **Ingestion**—If the person is conscious and not convulsing, give 2-4 cupfuls of water to dilute the chemical and seek medical attention immediately. Do not inducing vomiting.

Shipping Information

- ④ Proper Shipping Name: Sodium Perborate Monohydrate
- ④ UN Number: UN3377

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④ Hazard Class: 5.1

④ Labels: 5.1 (Oxidizer)

Please read the MSDS for this chemical before using