



Product Information Sheet

Purox^S grains

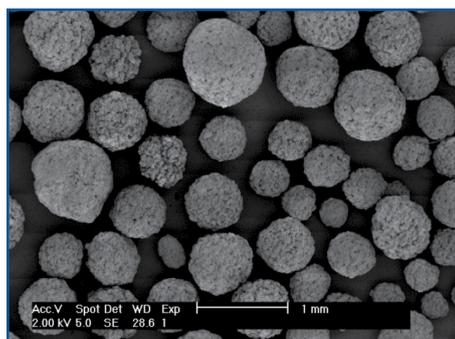
pure grade sodium benzoate

Purox S: Sodium benzoate of outstanding purity.

Purox[®] S has an extremely high purity, which is achieved through the use of Purox B top quality benzoic acid, produced in the Emerald Kalama Chemical plant in the Netherlands. Its low impurity levels give Purox S an excellent taste and odor profile, making it the right choice for the most demanding end-product requirements.

Superior performance in your products and processes.

In addition to its exceptional purity, Purox S offers outstanding physical properties for consistently high performance in all your handling, production and packaging processes. Thanks to the unique shaping process, Purox S has almost perfectly round particles with a narrow particle size distribution. The result of this tailor-made particle size distribution is an optimal combination of low dust content, high flow and excellent dissolution properties. Dust-free processing is achieved by the minimal content of small particles, and optimal dissolution performance by the absence of large particles.



The narrow particle size distribution of Purox S offers consistent processing characteristics, with dust-free production and good dissolution properties.

The right choice for your application.

The major application of sodium benzoate is as a food and beverage preservative, because it provides an effective combination of antimicrobial action, low cost and safety. Furthermore, Purox S has an excellent odor and taste profile. Common uses are in fruit juices and fruit salads, while it is also used in jellies, salad dressings, prepared salads, sauces and condiments, pickles, olives and especially diet soft drinks. Sodium benzoate is FDA-approved and GRAS classified. It is registered in Europe as food additive number E211. The maximum levels in various applications according to European legislation are given in the table below:

Application	Maximum level of E211 (mg/kg or mg/l as appropriate)
non-alcoholic flavored drinks	150
spirits with less than 15% alcohol by volume	200
low-sugar jams, jellies, marmalades and similar low calorie or sugar-free products and other fruit-based spreads	500
alcohol-free beer	200

Sodium benzoate is also used as a preservative in pharmaceutical preparations, toiletries and cosmetics, for example in toothpastes, powders, shampoos, syrups and glue.

It is also used as a corrosion inhibitor, for example in cooling liquids used in the automotive industry and in paper wrapping materials to prevent rust and corrosion of newly produced engine parts, bearings, razor blades, etc.

Serving our customers globally from our facilities in Europe and the US.

In addition to Purox S, we also supply Kalama[™] Sodium Benzoate (FCC/NF/EP/E-211 Grade) for direct use in food and beverage applications from our facility in Kalama, Washington USA. Specifications and additional information on this grade are given in separate Product Information Sheets.



PuroXS grains

pure grade sodium benzoate



CAS No. 532-32-1

EINECS No. 208-534-8

PRODUCT SPECIFICATION

Characteristic	Spec. Range	Unit
Assay (on dried product)*	99.9 min.	% (m/m)
Loss on drying	1.0 max.	% (m/m)
Color (10% (m/m) solution in water)	10 max.	APHA
Acidity	0.40 max.	mg NaOH/g
Alkalinity	0.37 max.	mg HCl/g
Phenol	2 max.	mg/kg
Insoluble matter	to pass test	-
Taste and odor	no off taste or odor	-
Heavy metals	< 10	mg/kg
Iron	< 1	mg/kg
Mercury	< 0.1	mg/kg
Sulfate, as SO_4^{2-}	< 50	mg/kg
Chloride, as Cl^-	< 50	mg/kg
Halogenated compounds, as Cl^-	< 25	mg/kg
Total chlorine, as Cl^-	< 75	mg/kg
Turbidity (of a 10% (m/m) solution in water)	< 0.5	NTU
Oxidizable substances	< 0.1	ml 0.02 mol KMnO_4/g
Organic volatile impurities	to pass test	-
Polycyclic acids	to pass test	-
Phthalic acid	50 max.	mg/kg

*Assay = 100% - total organic impurities

Purox S grains meets the requirements of FCC, USP/NF, Ph.Eur, BP, JP, E211 and is certified Kosher and Kosher for Passover  and certified  Halal.

SHELF LIFE: 3 YEARS



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Packaged to meet your process needs.

Purox S grains are available in a choice of packaging formats to meet specific process requirements. The product is packaged in robust, tamper-proof 25 kg form-fill-sealed polyethylene bags filled on a brand-new packaging line. This packaging protects Purox S against contamination and guarantees an extended shelf life by excellent moisture barrier properties. Purox S is also available in bulk quantities of 650 kg and 1,000 kg in high-quality big bags.

For inquires on Purox S: Contact purox.info@emeraldmaterials.com

About Emerald.

Emerald Kalama Chemical is Division of Emerald Performance Materials, a manufacturer of additives and polymers which make your products last longer, look, taste, smell, or perform better. Emerald is headquartered in Cuyahoga Falls, Ohio. The company has 4 business units, eight operations and approximately 700 employees. The Emerald Kalama Chemical Division is a world-scale producer of a variety of toluene oxidation products, with production facilities in the US and Europe. Products include benzoic acid, and various benzoate and dibenzoate ester, alcohol and aldehyde derivatives for food preservatives, flavor and fragrance ingredients, plasticizers and industrial applications. For more about Emerald, visit www.emeraldmaterials.com.