



# Kalama<sup>®</sup>

## Sodium Benzoate NF/FCC

CAS No.: 532-32-1 EC No.: 208-534-8

C<sub>6</sub>H<sub>5</sub>CO<sub>2</sub>Na

NF / FCC / EP / EEC E-211

### Foods and Beverages

- Prepared salads, jams and jellies, dressings, sauces, condiments, pickles, olives
- Soft drinks and spirits

### Personal Care & Cosmetics

- Lotions, hair care, liquid soaps, wipes, and feminine hygiene
- Oral care products

### Pharmaceutical Preparations

- Cough / cold / pain
- Topical ointments and lotions

### Chemical Synthesis

### Polypropylene Nucleation

### Corrosion Inhibition

Kalama<sup>®</sup> Sodium Benzoate is a high purity preservative with an effective combination of **antimicrobial action, low cost, safety, and an excellent odor/taste profile**. With a high purity level of at least 99.0%, it has little to no impact on formulation odor or color. It is a safe, effective solution that is Generally Recognized as Safe (GRAS) for preserving foods and beverages (21 CFR § 184.1733), where it is typically used at a maximum level of 0.1%. In personal care products such as lotions, hair care, and wipes, it is typically used at a maximum level of 3%.\*

Kalama<sup>®</sup> Sodium Benzoate is also used in industrial applications, including as a **chemical intermediate, a catalyst, a nucleating agent for polypropylene manufacture, and a corrosion inhibitor**. Corrosion inhibition has been reported at low concentrations for steel, zinc, copper, copper alloys, soldered joints, aluminum, and aluminum alloys, with the highest inhibition efficacy at pH levels 6-12.

### Superior Performance in Your Products and Processes

Kalama<sup>®</sup> Sodium Benzoate has outstanding physical properties for consistently high performance in all of your handling, production, and packaging processes. Emerald offers Kalama<sup>®</sup> Sodium Benzoate in three forms for tailored performance and ease of use in a wide variety of applications: **dense granules, powder, and EDF** (Extruded Dust-Free).

All forms are manufactured to meet **National Formulary (NF), Food Chemicals Codex (FCC), European Pharmacopeia (EP), and EEC E-211** specifications.

### Serving Our Customers Globally from Our Facilities in Europe and the U.S.

Emerald is a leading and reliable global supplier of benzoic acid, benzaldehyde, and other related chemistries. We used the highest standards for quality and responsible manufacturing at our strategically located sites in the U.S. and Europe, operating under ISO 9001:2015, ISO 14001:2015, and FSSC 22000 management programs.

*\*Use levels are application-dependent. Consider all applicable regional regulations.*



Typical Properties	Range	Unit
Forms	Dense, Powder, or EDF	
Taste and odor	No off taste or odor	-
Assay (on dried product)*	99.0 min.	% (m/m)
Water/Loss on drying	1.5 max.	% (m/m)
Acidity	0.24 max.	% as benzoic
Alkalinity	0.04 max.	% as NaOH
Phenol	2 max.	mg/kg
Heavy metals, as Pb	< 10	mg/kg
Iron	< 1	mg/kg
Mercury	< 1	mg/kg
Chloride, as Cl <sup>-</sup>	< 50	mg/kg
Halogenated compounds, total chloride	200 max	mg/kg
Halogenated compounds, ionic chloride <sup>-</sup>	300 max	mg/kg
Color and clarity of Solution	To pass test	-
Residual Solvents	To pass test	-

Above properties are typical of sodium benzoate and should not be confused with, or regarded as, sales specifications.

## Typical Physical Properties

Sodium Benzoate is the sodium salt of benzoic acid. One gram of the salt is soluble in 2mL of water, in 75mL of ethyl alcohol, and in 50mL of 90% ethyl alcohol. The salt is insoluble in ethyl ether.

A typical aqueous solution will be slightly alkaline and typically has a sweetish astringent taste. Sodium benzoate is a slightly hygroscopic, white, odorless or nearly odorless product.

Typical "tap" bulk densities are: Powder: ~44 #/ft<sup>3</sup> (0.70 g/cc); Dense: ~48 #/ft<sup>3</sup> (0.77 g/cc); EDF: ~34 #/ft<sup>3</sup> (0.55 g/cc). Sodium benzoate contains 84.7% of available benzoic acid.

## Shelf Life

The recommended retest date is 24 months from the date of manufacture provided that the material is stored in the original, unopened packages, at temperatures between 40-86°F (4.4-30°C) in an ambient humidity environment, under normal warehouse conditions.

Sodium benzoate is slightly hygroscopic and should be stored in sealed containers. Exposure to conditions of high humidity and elevated temperatures should be avoided for general storage.

## About Emerald

Emerald Kalama Chemical is a leading global supplier of benzoic acid, benzaldehyde, and related downstream chemistries, with world-scale, backward integrated facilities in The U.S. and Europe. Products include benzoate preservatives, intermediates, aroma chemicals, plasticizers, coalescents, industrial antioxidants, and rubber accelerators.

*Kalama® Sodium Benzoate is also available through our distribution partners. Please contact us for additional information.*

### Customer Service – Americas

Emerald Kalama Chemical, LLC  
1499 SE Tech Center Place, Suite 300  
Vancouver, WA 98683 USA  
+1.800.223.0035 or +1.360.954.7100  
kalama@emeraldmaterials.com

### Customer Service – EMEA

Emerald Kalama Chemical, BV  
Fascinatio Boulevard 200-232  
3065 WB Rotterdam, The Netherlands  
+31.88.888.0500  
purox.info@emeraldmaterials.com

### Customer Service – Asia Pacific

Emerald Performance Hong Kong  
1708 Shui on Centre, 6-8 Harbour Road  
Wanchai, Hong Kong  
+852.2598.7990  
kflex.asia@emeraldmaterials.com