

QUALITY PROTECTS.

QUALITY WORKS.

LANXESS
Energizing Chemistry

Kalama® and Purox® S Sodium Benzoate

A safe, biodegradable, and low-toxicity corrosion inhibitor

Kalama® and **Purox® S** Sodium Benzoate have a long-standing reputation as effective corrosion inhibitors, offering outstanding protection for a variety of metals and alloys. They offer desirable physical properties for consistent high performance in all handling, production, and packaging processes. LANXESS offers three forms of sodium benzoate for **best 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. LANXESS offers Sodium Benzoate in different grades from our facilities in Kalama, USA and Botlek, Netherlands.

In the pursuit of safer and more environmentally friendly solutions, the corrosion protection industry is switching away from toxic materials in favor of the proven performance and cost-effectiveness of sodium benzoate. As an **organic acid inhibitor**, LANXESS Sodium Benzoate provides long-lasting protection to coolants utilizing Organic Acid Technology (OAT) or Hybrid Organic Acid Technology (HOAT). With its superior **biodegradability**, nature-identical composition, **favorable EHS profile** and significantly **lower toxicity** compared to conventional alternatives, LANXESS Sodium Benzoate presents a compelling choice, especially for **specialized coolants for electric vehicles**. It has a **low electrical conductivity** for use in electrified vehicles, providing broad protection of the thermal management system of EVs.

Suitable for applications sensitive to odor, toxicity, and color

Automotive	Corrosion inhibitor for automotive coolants & antifreeze; specialized coolants for electric vehicles
Industrial	Protects steel, zinc, copper, copper alloys, soldered joints, aluminum, and aluminum alloys
Protection of Metal Containers	For products such as agricultural solutions, household products, waxes, polishes, and aerosols
Paper	Used in paper wrappers to inhibit corrosion of tin, steel, chrome plated and galvanized surfaces, even in humid environments

Key Features

- No formation of abrasive substances
- No frothing or foaming
- Optimal performance at low concentrations (1-3%)
- Highest protection offered between pH 6 to 12
- Readily biodegradable and nature-identical
- Low toxicity with a favorable EHS profile

Critical Quality Indicators

- Iron: < 1 ppm
- Heavy metals: < 10 ppm
- Water: typically 0.1%, max 1.5%
- Lead: < 2 ppm
- Chloride: < 50 ppm

About the LANXESS product portfolio:
Serving you globally –
with a strong commitment to sustainability

LANXESS is a **leading and reliable global supplier** of benzoic acid, benzaldehyde, and other related chemistries. LANXESS operates production facilities in five locations on three continents: U.S., Asia, Europe. Through the use of green electricity and biomass, the **ISCC+** certified sites will produce **mass balance certified renewable alternatives for the entire product portfolio** by the end of 2023. Therefore, LANXESS can provide high availability, fast international deliveries and a resilient supply chain that can cope with emerging geopolitical uncertainties.

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Unless specified to the contrary, the values given have been established on standardized test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that the results refer exclusively to the specimens tested. Under certain conditions, the test result established can be affected to a considerable extent by the processing conditions and manufacturing process.

Note: Information contained in this publication is current as of November, 2023. Please contact LANXESS Deutschland GmbH respectively LANXESS Corporation to determine if this publication has been revised.

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