QUALITY PROTECTS.

QUALITY WORKS.

Kalama[®] and Purox[®] Benzoate Preservatives for Personal Care

- Globally Trusted: Safe and effective in formulations up to pH 6.5 (approved for use in leave-on and rinse-off products)
- Highest Purity Available: Virtually odorless and colorless (superior color stability over other paraben alternatives and low-purity benzoates, which may yellow), low water content
- Versatile: Can be used in combination with other materials or boosters to extend preservation
- Green: Listed for use in products certified under green label programs, such as Ecocert, COSMOS, EU Ecolabel, and Nordic Swan
- Gentle: Sodium Benzoate is considered non-irritating to the skin by a WHO assessment



A Safer Alternative for Personal Care & Cosmetics

Kalama[®] and Purox[®] Sodium Benzoate, Benzoic Acid, and Benzyl Alcohol are safe, effective solutions to preserve freshness and maintain the integrity of personal care formulations — controlling yeasts, molds, and bacteria in formulations up to pH 6.5 — while also meeting consumer demand for **clean labels without parabens, formaldehyde donors, or sensitizers**.

Kalama and Purox benzoate preservatives offer an **optimal** balance of preservative efficacy, economy, and a consumer-friendly profile.

Ultra-Pure Ingredients from a Reliable Supplier

While benzoic acid occurs naturally many fruits, cloves, and cinnamon, Purox benzoic acid is synthetically produced at our world-scale facilities in Kalama, Washington, USA and Rotterdam, Netherlands. It is also used to produce our high quality benzoates at our FSSC 22000-certified operations, a GFSI-recognized certification program.

Using an innovative purification technology, LANXESS produces the purest grade of benzoic acid available—with a **guaranteed purity level of at least 99.98%**—to meet the highest quality standards of our customers. It is considered GRAS (U.S. FDA) and approved by the EU Commission for permitted uses and levels.

Ingredient		Properties	% Solubility at 25C	Formulating Tips	Applications								
Benzoic Acid	Purox[®] B Food/Pharma USP / NF / EP / JP	 pH: ~4.0 (not measured due to low water solubility) Purity: 99.98% minimum Form: flakes ("chips") 	 Water: ~1.7 (pH 4.5), ~0.5 (3.5), <0.08 (2.5) Propylene Glycol: 15.6 Glycerin: >0.85 Mineral Oil: very low Isopropyl Myristate: 6.0 Cyclopentasiloxane: 0.3 Polydimethyl Siloxane: 0.1 	Effective at pH 3 - 6.5 . Little impact on viscosity. Typically used at 0.3 - 0.5% (wt) and in combination with other preservatives.									
Benzoate Salts	Purox [®] S Grains NF/FCC/EP/BP/JP Kalama [®] Sodium Benzoate NF / FCC / EP	 pH: slightly alkaline Purity: 99.9% minimum (Purox), 99.0% minimum (Kalama) Forms: powder, dense, extruded (EDF) 	 Water: 38.0 Propylene Glycol: 15.0 Glycerin: >2.0 Mineral Oil: very low Isopropyl Myristate: 0.2 Cyclopentasiloxane: negligible Polydimethyl Siloxane: negligible 	Effective at pH 3 - 6.5 . Little impact on viscosity. Use salt stable thickener. Typically used at 0.3 - 0.5% (wt) alone or with other preservatives.									
Benzyl Alcohol	Kalama® Benzyl Alcohol NF/FCC/EP/BP/JP	 pH: slightly acidic Purity: 99.0% minimum (chlorine-free) Form: colorless liquid 	 Water: 4.0 Propylene Glycol: 100.0 Glycerin: 100.0 Mineral Oil: 1.4 - 1.6 Isopropyl Myristate: >2.0 Cyclopentasiloxane: >2.0 Polydimethyl Siloxane: 0.5 	Wide pH effectiveness. Slight impact on viscosity. Use salt stable thickener. Typically used at 0.3 - 0.5% (wt) alone or with other preservatives. Also used as a solvent and fragrance fixative.									
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Major Application D Effective

LANXESS Flavors & Fragrances is a leading and sustainable producer for high purity, nature identical ingredients. Our goal is to turn today's consumer wellness trends into your market advantage, with a proven portfolio of antimicrobials, aromatics, and multifunctionals that delight the senses. Our consumer-friendly technology solutions afford you the ability to manufacture products that address today's evolving consumer trends. Face/Neck/Body Care/Sun Shampoo Conditioner Shower/Bath, Liquid Soaps Antipersipirant / Deodorant Fragrance Wipes Oral Care Feminine Hygiene Cold / Cough / Pain Topical Ointments / Lotions



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