

Volume 95 Issue 7 | p. 12 | News of The Week

Issue Date: February 13, 2017 | Web Date: February 8, 2017

# New life for old preservative

**Maker of benzoates sees opportunity to replace suspect biocides in personal care**

By *Marc S. Reisch*



Emerald Kalama recently added this 100,000 metric-ton-per-year benzoic acid unit, shown under construction in Rotterdam last year.

Credit: Emerald Kalama Chemical

As retailers and product formulators band together to find new **cosmetic preservatives**

<<http://cen.acs.org/articles/94/i47/Restrictions-cosmetic-preservatives-ramp.html>> , Emerald

Kalama Chemical is investing in 50-year-old sodium benzoate, calling it a safe, readily available alternative for a number of biocides under fire.

Today, many **consumers shun preservatives**

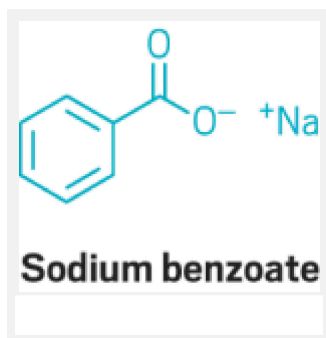
<<http://cen.acs.org/articles/92/i23/Close-Scrutiny-Cosmetic-Preservatives-Continues.html>>

such as parabens, methylisothiazolinone, and imidazolidinyl urea because of toxicity and skin sensitization concerns.

In November, the Green Chemistry & Commerce Council said it would launch a competition for new cosmetic preservative concepts backed by retailers and others

with prizes up to \$25,000. Driving the effort, GCC said, was a need to accelerate commercialization of safe and effective preservative systems in a market where so many of the old standbys are under attack.

But Emerald CEO Ed Gotch says the products his firm offers are already approved by regulatory authorities and accepted in food preservation. Sodium benzoate and its precursor, benzoic acid, have been around more than 50 years and are already widely used in foods, beverages, and pharmaceuticals to guard against mold, mildew, and fungus, he says.



The company is confident enough in sodium benzoate's potential in cosmetics and other uses that it plans to add 30,000 metric tons of annual production capacity at its Rotterdam plant by 2019.

Produced via toluene oxidation, benzoic acid is a "highly purified synthetic equivalent" to benzoic acid found in cranberries, Gotch says. Certification agency Ecocert accepts Emerald's benzoates in products that are labeled organic, he notes.

But although naturally derived benzoates would cost hundreds of dollars per kilogram, benzoic acid costs \$1.00–\$2.00 per kg, and sodium benzoate costs about a dollar more, Gotch says.

Chemical & Engineering News  
ISSN 0009-2347  
Copyright © 2017 American Chemical Society

---

## Comments

**Ghanakota Venkateshwar Rao (February 12, 2017 9:56 AM)**

What is the Id50 for benzoate? Will it not form kidney stones

» **Reply**