

BRONOPOL

INCI **2-Bromo-2-nitro-1,3-propanediol**
 CAS **52-51-7**

SPECIFICATIONS

Appearance White to yellow crystallin powder
 Assay (%) 99 min.

GENERAL INFORMATION

Bronopol is an antimicrobial agent commonly used as a preservative in many types of cosmetics, personal care products, and topical medications. It is reportedly very effective against gram-positive and gram-negative bacteria, particularly *Pseudomonas aeruginosa* as well as against fungi and yeasts. This substance may release formaldehyde and cross-reacts with other formaldehyde-releasing substances.

FORMULATION & RECOMMENDATIONS

Soluble in water and other polar solvents such as propylene glycol and isopropanol, we recommend adding Bronopol to aqueous phase as it will prevent the primary bacterial growth that takes place in this medium. Bronopol breaks down under alkaline conditions and elevated temperatures and should not be used in combination with secondary amines. This can lead to an undesired chemical reaction and formation of nitrosamines. For cold process products, we recommend adding Bronopol from the onset of the formulation preparation process.

When the control of yeasts and molds is required, Bronopol can be combined with other antimicrobials that provide additional anti-fungal activity. Blends of Bronopol and Parabens give excellent coverage of all microbial spectra. High compatibility with cationic, nonionic, anionic and amphoteric surfactants and many other raw materials, including other preservatives, makes Bronopol a very versatile product.

Dosage level

Recommended concentration 0.03 – 0.1 % (as preservative)

Solubility Soluble in water and other polar solvents such as propylene glycol and isopropanol

APPLICATIONS

Cosmetics

- Skin care
- Hair care
- Sun care
- Baby care
- Toiletries
- Make-up

Fragrances

Pharmaceuticals

Natural extracts

BENEFITS

- Easy to handle
- Good efficacy against moulds and bacteria
- Safe and effective in wide PH range
- approved for use in leave-on and rinse-off products

PACKAGING & SHELF LIFE

Available packaging

25 kg drums

Shelf life

24 months under proper storage conditions