

BULLETIN VC-854

## Optiphen™ BSB-W preservative

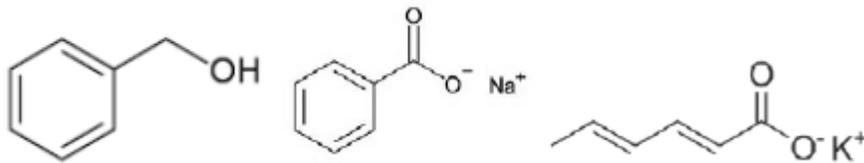
*Nature identical preservative for cosmetics*

### Product Description

Optiphen BSB-W is a globally approved, broad spectrum liquid preservative system that does not contain any halo-organic compounds, formaldehyde, formaldehyde releasers or parabens. It is effective against Gram-negative bacteria, yeast and mold. Optiphen BSB-W was designed specifically for personal care formulations with a pH up to 5.4 due to the inclusion of organic acids. It is based on a combination of nature-identical substances: Sodium Benzoate and Potassium Sorbate and Benzyl Alcohol.

ECOCERT-, COSMOS-, NATRUE- and BDIH-compliant, Optiphen BSB-W preservative is a synthetic version of naturally occurring substances with excellent efficacy and global approval for rinse-off and leave-on applications. It can be selected for natural or organic personal care products in order to meet the above standards.

### Formula



Benzyl Alcohol (and) Sodium benzoate (and) Potassium Sorbate

### Suggested Applications

Rinse-off-Cosmetics	Optiphen BSB-W preservative has proven to be an effective preserving system for rinse-off-products like shampoos, shower-gels, foam-baths etc., as these products generally have slightly acidic pH, which is a necessary condition for a safe use, as explained above.
Care-Products	Optiphen BSB-W preservative is well suited for high-quality care-cosmetics like creams, emulsions, lotions and gels, if they conform to the necessary pH-conditions. Optiphen BSB-W preservative can be used in O/W-emulsions as well as in W/O-emulsions.
Wet-Wipes	Its excellent water solubility makes Optiphen BSB-W preservative easy to incorporate in aqueous-based systems such as wet wipe solutions. It is important to control the acidic pH-value after the wipe is produced. This helps to eliminate any possible influence of the base sheet.

## Dosage and Processing

Optiphen™ BSB-W preservative should be used in cosmetic products at concentrations in the range 0.3% to 1.0%. When preserving simple surfactant-products dosages of 0.2% may be sufficient. For best preservation it is recommended to Optiphen BSB-W in formulations at pH values of 5.4 or less. The lower the pH of the final formulation, the better the efficacy of the preservative.

For the determination of the optimum dosage we recommend a preservation test, as the efficacy of this preservative is highly influenced by the product matrix. The staff of Ashland Inc.'s microbiological laboratory will be pleased to give customers the appropriate support.

## Product Properties

### Microbiological Profile

The combination of actives in Optiphen BSB-W preservative predominantly shows a microbistatic spectrum of activity against gram-positive and gram-negative bacteria. However, at the usual use-levels also growth of fungi and yeast will be inhibited.

### Technical Data

Appearance:	colorless to light brown solution
Odor:	characteristic
pH-Value:	9 approx.
Density:	1.108- 1.116 g/ml
Solubility:	2 % in water, room temperature

### Stability

Optiphen BSB-W preservative can be worked into final products at temperatures between 10°C and 80°C. Strong oxidizing agents and strong acids can lead to decomposition of the active ingredients.

### Storage

Storage is recommended in tightly closed original-containers at temperatures between 5°C and 25°C.

### INCI-Nomenclature

100-51-6	Benzyl Alcohol
7732-18-5	Water
532-32-1	Sodium Benzoate
24634-61-5, 590-00-1	Potassium Sorbate

More details regarding handling, toxicity and labelling are available in the Safety Data Sheet (SDS).

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Regulatory requirements governing the use, registration, and approval of preservatives around the world are continually changing and evolving.

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