

## BULLETIN VC-1010-2

# phyteq™ raspberry N multifunctional

*cosmos validated natural preservative booster for the cosmetics industry*

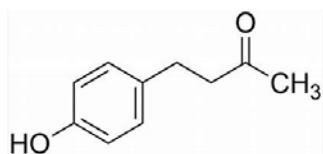
## product description

Phyteq™ Raspberry N, is a globally approved, Cosmos validated and 100% natural multifunctional additive, that will effectively preserve personal care formulations against bacteria, yeasts and molds, acting as preservative potentiator. It is usually combined with very low doses of preservatives or alternative antimicrobials.

Based on Raspberry Ketone, a readily biodegradable phenolic compound occurring in red raspberry and other plants, it has a low environment impact in sourcing and manufacturing. Folk traditions of native peoples throughout the world have applied *Rubus*\* for multiple medicinal uses. Its use is documented in traditional Chinese medicine and the Ayurvedic tradition of India [1].

Phyteq™ Raspberry N can be used in a variety of cosmetic formulations, providing excellent formulation stability and performance over a wide pH range (4-8). Its additional skin benefits make it an excellent choice for skin care products. It acts as strong antioxidant and free radical scavenger, helps to protect the elasticity of the skin and improves skin biology by reducing of skin inflammation or irritation.

## formula



## suggested applications

Care-Products	Phyteq™ Raspberry N is well suited for high quality natural certified care-cosmetics like creams, emulsions, lotions and gels, including difficult to preserve sun care products. Due to its good dispersibility it can be easily incorporated into O/W-emulsions as well as in W/O-emulsions.
Rinse-off-Cosmetics	Phyteq™ Raspberry N is applicable for use in a variety of rinse off personal care preparations such as shampoos, conditioners etc.
Oral Care	Due to its wide pH applicability, neutral taste and odor, it is well suited for a wide range of oral care products.

## dosage and processing

The recommended dosage for Phyteq™ Raspberry N in cosmetic products ranges from 0.5 to 1%. For the determination of the optimum dosage we recommend a preservation test, as the efficacy is highly influenced by the product matrix. The staff of Ashland's microbiological laboratories will be pleased to give customers the appropriate support.

The white, free-flowing crystals of Phyteq™ Raspberry N show solubility at concentration of 0.5% or lower in water or water-based formulations. Addition of glycols will help with solubilization of the material and to avoid recrystallisation at lower temperatures.

If higher concentrations of Phyteq™ Raspberry multifunctional are used, the presence of glycols and/or oils in the oil phase for emulsion products will help to avoid (re-)crystallization.

Phyteq™ Raspberry N can be dosed at any phase of production. In emulsions it can be added in the water phase with heating up to max 80°C until dissolved or alternatively at the post-emulsification stage. Another solution could be to prepare a premix in heated glycols so that this premix can be added in the water phase at room temperature.

Usually, no effect on color or odor can be observed. Heating processes up to 80°C are tolerated well. To surfactant-based cleansing systems it can be post added to the formulation with good mixing prior to pH adjustment. Higher amounts of surfactants may lead to higher dosages of Phyteq™ Raspberry N, which could impact the viscosity of the formulation. If a drop in viscosity is observed we recommend adjustment using a salt curve approach, or by adding additional traditional polymeric or associative thickeners. Phyteq™ Raspberry N usually has no impact on product stability or gel structures, in the event of any formulation issues Ashland's care team can be contacted to provide further assistance.

## product properties

### microbiological profile

Phyteq™ Raspberry N, as a preservative booster, significantly increases the antimicrobial activity of other preservatives but may have limited activity when used alone.

### technical data

Appearance:	white crystals
Odor:	mild, fruity
pH-Value:	not applicable

At typical dosages no dispersibility issues are to be expected, see further details on previous page.

### stability

Phyteq™ Raspberry N can be worked into finished products at temperatures between 10 °C and 80°C. pH-tolerance is given for acidic to alkaline environment (pH 4-8).

### storage

Storage is recommended in tightly closed original-containers in a cool and dry place, protected from light at temperatures no more than 25°C.

## INCI-nomenclature

5471-51-2      Raspberry Ketone

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

\**Rubus*: botanical genus, includes raspberries.

[1] <https://journals.ashs.org/hortsci/view/journals/hortsci/45/11/article-p1587.xml>

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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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