

## Phenonip®

Phenonip® is now one of the longest established and most popular proprietary preservative blends available to the cosmetics and toiletries industry.

### **Benefits of Phenonip®**

- Broad spectrum activity; effective against Gram-negative and Gram-positive bacteria, yeasts and moulds.
- Readily incorporated into formulations.
- Retains activity over the range pH 3.0 - 8.0.
- Compatible with a wide range of cosmetic raw materials.
- Non-volatile - there is no loss of preservative due to volatility even on prolonged storage.
- Highly stable - aqueous solutions of Phenonip® can withstand autoclave sterilisation with no loss of activity.
- Phenonip® has an excellent toxicological profile and is non-irritant to skin, eye and mucous membranes at normal use concentrations.
- The components of Phenonip® are biodegradable at the low concentrations found in effluent.

Phenonip® has been successfully used to protect most types of personal care products from microbial contamination. As with other preservations, the correct use concentration depends upon several factors including the chemical and physical nature of the product, its ability to support microbial growth and the likelihood of recontamination during use. Experience has shown that Phenonip® will preserve cosmetics and toiletries when incorporated at concentrations from 0.25% to 1.0%. The higher concentrations are generally required only for formulations which, by their nature, are particularly difficult to preserve. Shampoos and foam baths may be preserved with Phenonip® at concentrations typically between 0.25 - 0.65%. Products with a high protein content may require levels from 0.5% - 1.0%.

Other surfactant-based products, for example liquid dishwashing detergents, are generally preserved with Phenonip® over the range 0.2% - 0.6%. Emulsified systems, both o/w and w/o types, may be effectively preserved by the addition of Phenonip® at 0.4 - 0.7%. Phenonip® can also be used to preserve emulsions based on nonionic surfactants, but slightly increased concentrations may be required, eg. 0.5 - 1.0%.

### **Regulatory Status**

Phenonip® is an optimised blend of paraben esters in phenoxyethanol.

INCI Name - phenoxyethanol, methylparaben, ethylparaben, butylparaben, propylparaben, isobutylparaben.

Phenonip® is also permitted for use as a preservative in the USA and Japan. Methylparaben and propylparaben have GRAS (Generally Recognised As Safe) status in the USA.