LiquaPar Optima is a broad spectrum preservative used in a wide range of cosmetic products such as: creams, lotions, ointments, exfoliants, lipsticks, liquid and cream makeup, eyeliners, mascaras, etc. LiquaPar is perfect for products ranging from salt scrubs to toners to lotions and creams. Not to mention shampoo and liquid soap. LiquaPar Optima is **effective in both aqueous and anhydrous applications.**

LiquaPar Optima as a liquid preservative system, is an optimized blend of Phenoxyethanol, Methylparaben, Isopropylparaben, Isobutylparaben, and Butylparaben. This unique blend of parabens is primarily antifungal, and when combined with Phenoxyethanol, the complete system has broad spectrum antimicrobial activity. These components partition within a formula according to their water or oil affinity to provide total antimicrobial coverage of the water phase, oil phase, oil soluble components, and emulsion interfaces. LiquaPar Optima is effective against Gram-positive and Gram-negative bacteria, yeast, and mold. It does not contain halo-organic components, formaldehyde, or formaldehyde releasers.

LiquaPar Optima is approved for use worldwide.

Applications

- For use in a broad range of applications; especially effective in emulsions.
- Soluble in commonly used solvents and can be easily incorporated into most formulations; in **aqueous systems**, a co-solvent or surfactant may be needed to help solubilize the preservative.
- Can be used to preserve a wide range of leave-on and rinse-off products.
- Can be used in a pH range of 3.0-7.5.
- Higher levels of LiquaPar Optima may be required in formulations with higher levels of non-ionics and proteins since these compounds are known to interfere with parabens.
- Although Phenoxyethanol is slightly volatile, LiquaPar Optima is stable at temperatures up to 85°C (**185°F**), but it is always best to add preservatives at the coolest possible temperature.
- For cold mixed systems, add LiquaPar Optima early in the process to allow for adequate mixing.

Recommended use level: is 0.5% - 1.0% of total formulation weight.

Directions: Add to formulation at temps of 85°C (**185°F**) or lower.

INCI: Phenoxyethanol (and) Methylparaben (and) Isopropylparaben (and) Isobutylparaben (and) Butylparaben.

PROS & CONS: LiquaPar Optima is oil based and this has to be taken into consideration when formulating. For emulsions you will have not problems. However, LiquaPar Optima will need to be solubilized first for formulas that are mostly water. If using in a room or body spray you will need to solubilize LiquaPar Optima with

polysorbate 20 before adding to your room spray solution. Properly solubized in emulsions or with polysorbate 20 in mostly water based products, LiquaPar Optima remains an effective antimicrobial.

Liquapar Optima is a paraben based preservative system. Liquapar Optiima is one of the most easy to use, robust, and effective preservative systems available to use. Liquapar Optima is very easy to use and very economical.