

TroyCare™ EPP37

Product Code: 20173

Multifunctional personal care ingredient

Description

TroyCare™ EPP37 is a clear, multifunctional personal care ingredient comprised of Phenylpropanol and Ethylhexylglycerin. Both ingredients are globally approved for use in a wide range of personal care applications. Ease of formulation, low use levels, and a mild, pleasant aroma make TroyCare EPP37 an excellent multifunctional preservative solution for many personal care and cosmetic applications, especially those formulations that require a greater level of fungicidal protection.

Application & Use

In addition to its primary functions as a fragrance and emollient, TroyCare EPP37 also provides broad-spectrum protection against attack by bacteria and fungi. TroyCare EPP37 contains an optimized blend of ingredients, which makes it an ideal broad-spectrum preservative solution for a wide variety of personal care products, cosmetics, and toiletries, particularly formulations that are more prone to fungal contamination:

- Body creams and lotions
- Hair gels
- Wet wipes
- Color cosmetics

Product Highlights

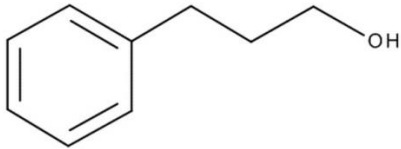
- Mild floral fragrance
- Emollient properties for skin softening
- Broad-spectrum efficacy, optimized for fungicidal protection
- Globally approved for use in all rinse-off and leave-on applications
- Stable and effective across a wide pH range 3-12
- Excellent temperature stability to 85°C
- Easy formulating liquid

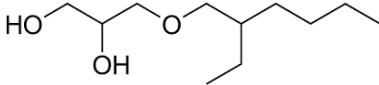
Physical Properties

The following are typical properties of TroyCare EPP37; they are not to be considered product specifications.

Appearance:	Clear colorless solution
Solubility:	0.5% in water
Specific Gravity, 25°C:.....	1.0
pH (0.5% solution)	6.7
Viscosity, 25°C	30 cps
Shelf Life	2 years

Active Substance

70%	Phenylpropanol CAS No. 122-97-4 EINECS No. 204-587-6	
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30%	Ethylhexylglycerin CAS No. 70445-33-9 EINECS No. 408-080-2	
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Antimicrobial Activity

Bacteria	ATCC	MIC %	Bacteria	ATCC	MIC %
<i>Escherichia coli</i>	8739	≤ 0.5	<i>Burkholderia cepacia</i>	25416	≤ 0.5
<i>Pseudomonas aeruginosa</i>	15442	≤ 2.0	<i>Enterobacter aerogenes</i>	13048	≤ 1.0
<i>Staphylococcus aureus</i>	6538	≤ 2.0	<i>Enterobacter cloacae</i>	15361	≤ 0.5
<i>Staphylococcus epidermidis</i>	12228	≤ 0.5	Fungi		
<i>Serratia marcescens</i>	14223	≤ 1.0	<i>Candida albicans</i>	10231	≤ 1.0
<i>Alcaligenes faecalis</i>	25094	≤ 0.5	<i>Aspergillus niger</i>	6275	≤ 0.5
<i>Klebsiella pneumoniae</i>	4353	≤ 0.25			

Formulation Considerations

The microbiological performance of **TroyCare™ EPP37** is ideally suited for a wide range of personal care formulations but is optimized for those formulations requiring more fungicidal protection, as is common with many leave-on and wet wipe formulations. The following guidelines are presented for your consideration. As part of a best practice manufacturing strategy, it is advised to confirm long term efficacy, compatibility and stability of TroyCare EPP37 in the final formulation.

Typical Use levels - The ingredients in **TroyCare EPP37**, Phenylpropanol and Ethylhexylglycerin, both have strong safety profiles and are approved for use in all rinse-off and leave-on personal care formulations. TroyCare EPP37 is typically used at levels of 0.5-0.9 % by weight of the final product. The actual level of treatment to protect any particular system depends on a variety of factors including, but not limited to, the initial level of microbiological contamination, the components of the system, and the likelihood of exposure to repeat microbiological challenges, and the temperature and pH of the system. Because personal care formulations vary with each manufacturer and these variations may impact the preservative, it is recommended that the manufacturer confirm the efficacy of TroyCare EPP37 in use. Troy can assist you in these matters.

Addition to the Formulation - TroyCare™ EPP37 is a clear liquid product that is easy to handle. Because of its low water solubility it may be combined with emulsifiers and solvents prior to the addition of water. Often, however, TroyCare EPP37 can be added directly to the aqueous phase. As per standard best manufacturing practice, TroyCare EPP37 should be added at a point where there is good agitation or mixing to achieve homogeneous distribution throughout the formulation.

Effect of Temperature - In a hot process, it is recommended that TroyCare EPP37 be added during the cooling stage after the temperature is below 85°C. While TroyCare EPP37 is stable and efficacious up to 85°C, we recommend storing indoors at temperatures between 0-35°C.

pH Stability - TroyCare EPP37 is fully stable and provides superior preservation over the wide pH range of 3-12 which covers most personal care formulations. This allows for considerable flexibility in processing and formulating the end product.

Shipping & Packaging

TroyCare EPP37 is packaged in:

Shipping Container	Net Weight	Shipping Container	Net Weight
Pail (US)	40 lb / 18 kg	Drum	441 lb / 200 kg
Pail (Thailand)	66 lb / 30 kg		

Product Safety Information

For health and safety data and handling, storage and disposal procedures, please refer to the Safety Data Sheet (SDS) and product label.

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