



LEVULINIC ACID FOR PERSONAL CARE AND BEAUTY PRODUCTS

The benefits are more than skin deep!

- > Renewable biobased ingredient used for perfuming and skin conditioning
- > Alternative to benzoic or sorbic acid in formulation systems for personal care products
- > Levulinic acid and its salts are already used in organic and natural cosmetic formulations with acidic pH.

Use levulinic acid and salts for organic formulations which condition skin and regulate pH.

Customer demand for natural cosmetics is growing. Levulinic acid from GFBiochemicals helps meet this product shift. Produced directly from biomass, levulinic acid is a renewable biobased alternative to petro-based products. Levulinic acid is a colorless keto acid which is soluble in water, ethanol and diethyl ether. It is easily used in multi-functional systems typically at 0.5-1.5% of a formulation. Applications include perfuming, skin conditioning and pH regulation.

The salts of levulinic acid are also water-soluble and commonly used within beauty and personal care products. They give an inherent fresh odor to emulsions.



PRODUCT SPECIFICATIONS

- > INCI name: Levulinic acid
- > EINECS / EC No. 204-649-2
- > CAS number: 123-76-2
- > Chemical name: 4-oxo-pentanoic acid
- > Synonyms: 4-oxovaleric acid
- > Shelf life: Store in tightly sealed containers in a cool, dark place for 12 months after date of manufacture.

Levulinic acid is a versatile building block for chemicals and materials derived directly from biomass.

ABOUT GFBIOCHEMICALS

Founded in 2008, GFBiochemicals uses breakthrough technology to commercialize levulinic acid – a valuable biobased building block for specialty chemicals and materials. GFBiochemicals has offices in Milan (Italy), Minneapolis (USA) and Geleen (the Netherlands) and manufacturing plant for levulinic acid in Caserta (Italy).



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