

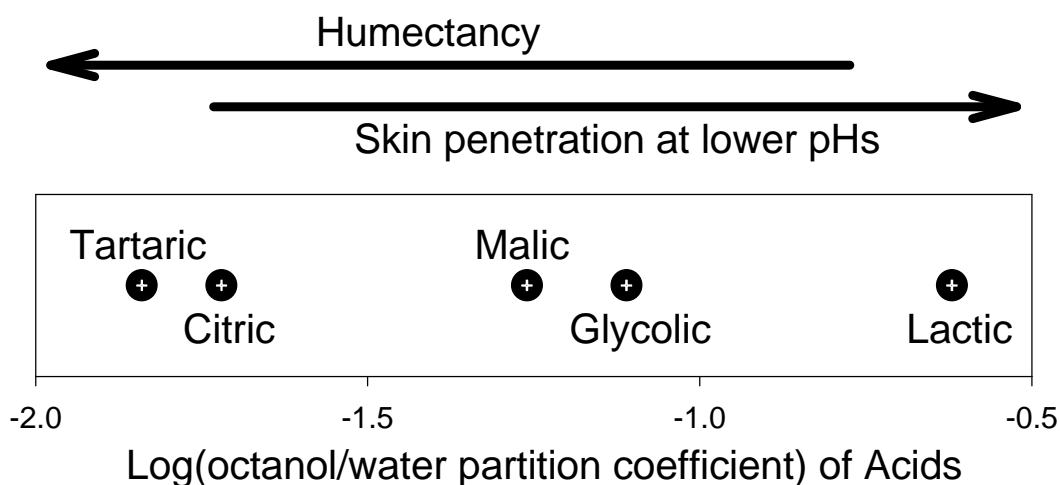
MALIC ACID IN FACIAL SKINCARE PREPARATIONS

Bartek Malic Acid is preferred in facial skincare products because it has a balance of humectant and skin penetration properties, compared to other fruit acids commonly used in these products.

Alpha-hydroxy acids are used in cosmetic dermatology for several reasons:

- to moisturise the stratum corneum by humectant action
- to promote exfoliation of the stratum corneum, which results in a thinner, more flexible stratum corneum and improved skin smoothness
- to increase epidermal and dermal firmness and thickness when used at high levels in salon products – this improves skin smoothness and reduces wrinkles

As shown in the diagram below, Malic Acid has an octanol/water partition coefficient midway between that of other alpha-hydroxy acids commonly used in skincare products. Malic Acid has a balance of humectant and skin penetration properties, since these properties are related to the octanol/water partition coefficient. *Malic Acid is more balanced in these properties than Citric and Tartaric Acids, the other two fruit acids.*



RECOMMENDATIONS FOR USE: Malic Acid is used alone or in combination with other alpha-hydroxy acids. In cosmetic products, the total acid level should not exceed 10% and the pH of the product should not be less than 3.5. These products typically contain 2-5% total acid.

In salon products for use by trained cosmetologists, the total acid level should not exceed 30% and the pH of the product should not be less than 3.0.

BARTEK

Bartek Ingredients Inc. • 421 Seaman St. • Stoney Creek, Ontario L8E 3J4 • Canada
Tel: (905) 662-3292 • (905) 662-1127 • Order desk: 1-800-263-4165 • Fax: (905) 662-8849
www.bartek.on.ca • sales@bartek.on.ca