

Dihydroxyacetone

Specification Sheet

Description: FDA-approved self-tanning agent obtained by bacterial degradation of natural phosphate sugar. Synonyms: dihyxal, otan, oxantin.

CAS: 96-26-4

INCI Name: 1,3-dihydroxy-2-propanone

Composition: 1,3-dihydroxy-2-propanone

Appearance: Off-white, fine crystalline powder, characteristic odor.

pH Value: 4-6

Benefits:

- Reacts with proteins in the skin thereby forming melanoidin-like brown compounds within 2 hours producing a suntanned appearance.
- Note: tan does not protect against UV-rays like the melanin-tan produced by sunbathing.
- Can be combined with erythulose.

Use: Can be added to formulations as is, usual final concentration 2-12%, lower concentration for lighter tan or face, higher concentration for darker shade and body. DHA may lose its tanning effect (or induce discolorations) when combined with alpha-hydroxy acids, titanium dioxide, zinc oxide, iron oxide pigments, or certain perfumes. Avoid using amino acids, proteins, peptides, EDTA. Final product should be in the pH range between 3.5 and 5, this will prevent it from early degradation. Usually combined with erythulose for a deeper, natural looking tan. For external use only.

Applications: All kinds of self-tanning cosmetic products including creams and lotions, cream foundations.

Solubility: Soluble in water & alcohol.

Preservation: Preservative-free

Storage: Store refrigerated (4-8°C/39-46°F)

Country of Origin: Germany

Raw material source: Glycerin, sorbitol

Manufacture: DHA is produced by bacterial-driven enzymatic degradation of natural glycerin in the presence of sorbitol.

Animal Testing: Not animal tested.

GMO: GMO-free

Vegan: Does not contain animal-derived components.

HS Code: 2914406000

Proposition 65: Proposition 65: WARNING: This product can expose you to chemicals including Formaldehyde (50-00-0) and methanol (67-56-1) which is known to the State of California to cause cancer or reproductive toxicity. For more information, go to www.P65Warnings.ca.gov

Regulatory Information: Dihydroxyacetone is a FDA-approved color additive but is exempt from batch certification. It may be safely used in amounts consistent with good manufacturing practice in externally applied cosmetics intended solely or in part to impart a color to the human body.