

Dihydroxyacetone

Specification Sheet

Description: FDA-approved self-tanning agent obtained by bacterial degradation of natural phosphate sugar. Off-white, fine crystalline powder, characteristic odor, pH 4-6, soluble in water & alcohol. Synonyms: dihyxal, otan, oxantin.

CAS: 96-26-4

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

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 erythrose

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 erythrose for a deeper, natural looking tan. For external use only.

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

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

Country of Origin: USA

Raw material source: Glycerin derived from sugar cane or sugar beets

Manufacture: DHA is produced by bacterial-driven enzymatic degradation of natural glycerin obtained from phosphate sugar.

Animal Testing: Not animal tested

GMO: Not tested for GMOs

Vegan: Does not contain animal-derived components