

Dihydroxyacetone (DHA)

FACT SHEET

Description: FDA-approved self-tanning agent obtained by bacterial degradation of natural phosphate sugar, pH 4-6, soluble in water & alcohol. Off-white, fine crystalline powder, no odor. CAS# 96-26-4.

INCI Name: 1,3-dihydroxy-2-propanone (synonyms: dihyxal, otan, oxantin).

Properties: DHA reacts with proteins in the skin thereby forming melanoidin-like brown compounds within 2 hours producing a suntanned appearance, this tan does not protect against UV-rays like the melanin-tan produced by sunbathing.

Use: Can be added to formulations as is, usual final concentration 2-8%, DHA may lose its tanning effect (or induce discolorations) when combined with AHA's, titanium dioxide, zinc oxide, iron oxide pigments, or certain perfumes.

Applications: All kinds of self-tanning cosmetic products including creams & lotions (o/w & w/o emulsions) & cream foundations.