## THE CHEMISTRY OF FAKE TAN





**1-15% DHA** USUALLY 5% IN STORE

The 'tan' produced by tanning lotions only has an SPF of around 3. Because of this, many tanning lotions also contain some sun block in their formulations in order to help guard against UV light from the sun.

Darkens for around 24 to 72 hours after application. Erythrulose takes longer to develop its full effect. The FDA approved DHA for use in tanning lotions in 1977. Use in spray tanning booths isn't approved.

1 REACTS APPLIED APPLIED HOW IT WORKS 3

The DHA in tanning lotions reacts with amino acids in the dead layer of skin on the skin's surface. This occurs via the Maillard reaction - the same type of reaction that occurs in baking and roasting of foods such as meat during cooking. This

reaction leads to the production of melanoidins, which are the chemicals that cause the appearance of a tan.

## THE CHEMICALS USED IN FAKE TANNING PRODUCTS ALSO HAVE SOME POTENTIAL RISKS; PARTICULARLY IN SPRAY TAN BOOTHS, WHERE THERE IS THE POSSIBILITY OF INHALATION.





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