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## **PRODUCT DATA SHEET**

## ORANGE PEEL WAX

Orange Peel Wax is a soft orange vegetable wax obtained from the rind of the orange fruit after separation from orange essential oils and citrus terpenes. The wax protects the fruit against the environment while at the same time allowing breathing and maintenance of water balance. Composition and consistency are similar to lanolin. Orange Peel Wax can be looked upon as a vegetable version of that animal wax. In many formulations it can substitute lanolin.

Orange Peel Wax consists of a complex mixture of special esters (ca. 50-65 %, C44-C58), free fatty acids (6-15 %, C14-C22), hydrocarbons (8-15 %, C21-C33), free phytosterols (ca. 4-8 %) and free alcohols. In addition to this Orange Peel Wax contains small amounts of flavonoids, carotenoids, glycolipids and phospholopids which are well known for their anti-oxidant, anti-inflammatory, anti-microbial and sunscreen properties. The phytosterols in Orange Peel Wax act as co-emulsifiers aiding emulsion stability.

Orange Peel Wax is an emollient wax with excellent skin feel, contributing to barrier function, sunscreen enhancing and moisture regulation, offering similar protection to the human skin and hair as it does to the fruit.

**Applications:** emulsions, hair care, sun care, sticks

## **Specifications:**

Appearance semi-solid Melting point: 35- 60 °C

Congealing point: 30- 55 °C ASTM D938 Acid value: 10- 20 mg KOH/g USP 401 Saponification value: 70-110 mg KOH/g USP 401 Hydroxyl Value 10-40 mg KOH/g USP 401

Odour: very light orange scent
Colour: Dark Orange / Brown

CTFA/INCI-Name : Citrus Aurantium Dulcis (Orange) Peel Wax

EU: Citrus Aurantium Dulcis Peel Cera

USP 741 Class II

More detailed information on this specialty wax of Koster Keunen is contained in the article by S.L. Puleo and A.W. Peters Rit in Cosmetics & Toiletries Magazine, 109(8), August 1994, pp. 42-48.