

Cetyl esters wax (Cera cetyla)

Chemical name. C₁₄₋₁₈ Fatty acids C₁₄₋₁₈ alkyl esters; CAS Reg. No. 85566-24-1.

Other name. Synthetic spermaceti.

Description. White to almost white, somewhat translucent flakes (5 µm to several millimetres in the largest dimension), with a crystalline structure and a pearly lustre when caked; odour, faint, mild, aromatic.

Solubility. Practically insoluble in water and ethanol (~750 g/l) TS; soluble in ether R; slightly soluble in hexane R.

Category. Stiffening agent.

Storage. Cetyl esters wax should be kept in a well-closed container, protected from heat.

Additional information. Cetyl esters wax has a mass density of about 0.83 g/mL at 50 °C.

Requirements

Definition. Cetyl esters wax is a mixture consisting primarily of esters of saturated fatty alcohols (C₁₄ to C₁₈) and saturated fatty acids (C₁₄ to C₁₈).

Melting range. 43-47 °C.

Acid value. Not more than 5.

Iodine value. Not more than 1.

Saponification value. 109-120.

Paraffin. To 1 g add 50 mL of boiling ethanol (~750 g/l) TS; the wax is completely dissolved.