

## Penetration Depth Study of Linear Siloxanes through Human Skin

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**Abstract :** Siloxanes are a common ingredients in medicinal products used on the skin, as well as cosmetics. It is widely believed that the silicones are not capable of overcoming the skin barrier. The aim of the study was to verify the possibility of penetration and permeation of linear siloxanes through human skin and determine depth penetration limit of these compounds. Based on the results it was found that human skin is not a barrier for linear siloxanes. PDMS 50 cSt was not identified in the dermis suggests that this molecular size of silicones (3780Da) is safe when it is used in the skin formulations.

**Keywords :** linear siloxanes, methyl siloxanes, skin penetration, skin permeation

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