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22 Date of Revision

4 May 2017.

Squalane

1 Nonproprietary Names

BP: Squalane
PhEur: Squalane
USP–NF: Squalane

2 Synonyms

Carolane; *Cosbiol*; dodecahydrosqualene; *Fitoderm*; perhydrosqualene; *Phytolane LS*; *Robane*; spinacane; squalanum; *Vitabiosol*; *Wax-O-Sol*.

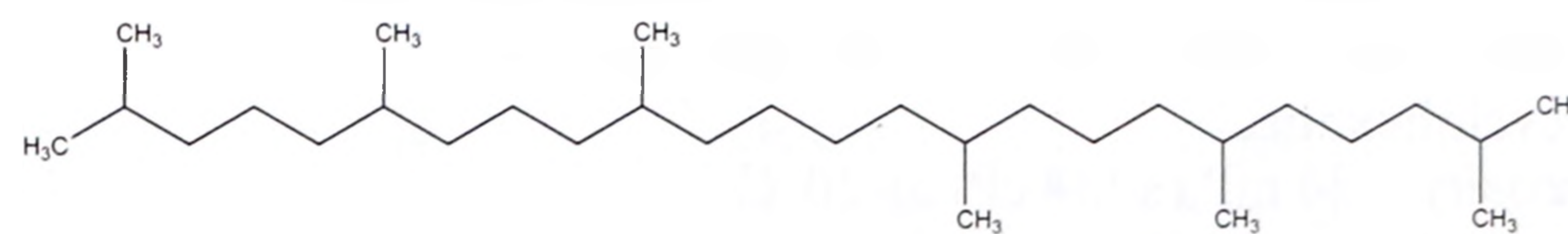
3 Chemical Name and CAS Registry Number

2,6,10,15,19,23-Hexamethyltetracosane [111-01-3]

4 Empirical Formula and Molecular Weight

C₃₀H₆₂ 422.8

5 Structural Formula



6 Functional Category

Emollient; ointment base; penetration enhancer.

7 Applications in Pharmaceutical Formulation or Technology

Squalane is included in topical pharmaceutical preparations to increase skin permeability owing to its miscibility with human sebum. It is also used as a carrier of lipid-soluble drugs in suppositories.

Squalane is used as a vaccine adjuvant^(1–4) and as a component of nanoemulsions and microemulsions that have been developed for oral, nasal, and transdermal pharmaceutical applications.^(5–8)