



>>Entry Name: Pentacosanoic acid

Synonym(s): Hyenic acid

CAS Registry Number: 506-38-7

$\text{H}_3\text{C}(\text{CH}_2)_{23}\text{COOH}$

Molecular Formula: $\text{C}_{25}\text{H}_{50}\text{O}_2$

Molecular Weight: 382.669

Accurate Mass: 382.38108

Percentage Composition: C 78.47%; H 13.17%; O 8.36%

Biological Source: Isol. from plant sources e.g. *Agave sisalana*, *Citrus bergamia*, *Shorea maranti*

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 84-85°

Rare Chemicals Library: S40969-3

Sigma: P8911

>>Derivative: Me ester

Molecular Formula: $\text{C}_{26}\text{H}_{52}\text{O}_2$

Molecular Weight: 396.696

Accurate Mass: 396.39673

Percentage Composition: C 78.72%; H 13.21%; O 8.07%

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 61-62°

>>Derivative: Et ester

Molecular Formula: $\text{C}_{27}\text{H}_{54}\text{O}_2$

Molecular Weight: 410.722

Accurate Mass: 410.41238

Percentage Composition: C 78.96%; H 13.25%; O 7.79%

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 58-59°

Boiling Point: $\text{Bp}_{0.5}$ 216-217°

>>Derivative: Nitrile

Molecular Formula: $\text{C}_{25}\text{H}_{49}\text{N}$

Molecular Weight: 363.669

Accurate Mass: 363.386499

Percentage Composition: C 82.57%; H 13.58%; N 3.85%

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 58-59°

References:

Razafindrazaka, J. *et al.*, *Bull. Soc. Chim. Fr.*, 1963, 1633, (*isol*)

Schildknecht, H. *et al.*, *Fette, Seifen, Anstrichm.*, 1964, **66**, 176, (*synth*)

Sundt, E. *et al.*, *Helv. Chim. Acta*, 1964, **47**, 408, (*isol*)

Tember, G.A. *et al.*, *CA*, 1974, **80**, 47410, (*synth*)