



>>Entry Name: Tetracosanoic acid

Synonym(s): Lignoceric acid

CAS Registry Number: 557-59-5

$\text{H}_3\text{C}(\text{CH}_2)_{22}\text{COOH}$

Molecular Formula: $\text{C}_{24}\text{H}_{48}\text{O}_2$

Molecular Weight: 368.642

Accurate Mass: 368.36543

Percentage Composition: C 78.20%; H 13.12%; O 8.68%

Biological Source: Occurs in some waxes and less commonly in some triacylglycerols. Fairly widespread in plant oils

Physical Description: Cryst. (AcOH)

Melting Point: Mp 87.5-88°

Solubility: BERDY SOL: Sol. CHCl_3 , hexane; poorly sol. H_2O

Other Data: Polymorphous

Aldrich: 23468-0

Fluka: 87110

Sigma: L6641

>>Derivative: Me ester

CAS Registry Number: 2442-49-1

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%

Melting Point: Mp 59.5-60°

Aldrich: 29905-7

Fluka: 87115

Sigma: L1126

>>Derivative: Et ester

CAS Registry Number: 24634-95-5

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%

Melting Point: Mp 56-57°

Boiling Point: Bp_{0.24} 198-199°

>>Derivative: Tetracosyl ester

Synonym(s): Tetracosanoyl tetracosanoate. Lignoceryl lignocerate

CAS Registry Number: 1001-43-0

Molecular Formula: $\text{C}_{48}\text{H}_{96}\text{O}_2$

Molecular Weight: 705.285

Accurate Mass: 704.74103

Percentage Composition: C 81.74%; H 13.72%; O 4.54%

Biological Source: Isol. from aerial parts of *Flemingia strobilifera*

Physical Description: Wax

Melting Point: Mp 82-84°

>>Derivative: Nitrile

Synonym(s): Tricosyl cyanide

Molecular Formula: $\text{C}_{24}\text{H}_{47}\text{N}$

Molecular Weight: 349.642

Accurate Mass: 349.370849

Percentage Composition: C 82.45%; H 13.55%; N 4.01%

Melting Point: Mp 61-62°