



>>Entry Name: **15-Methylhexadecanoic acid**, 9CI

Synonym(s): 15-Methylpalmitic acid. Subtiloheptadecanoic acid

CAS Registry Number: 1603-03-8

$(\text{H}_3\text{C})_2\text{CH}(\text{CH}_2)_{13}\text{COOH}$

Molecular Formula: $\text{C}_{17}\text{H}_{34}\text{O}_2$

Molecular Weight: 270.454

Accurate Mass: 270.25588

Percentage Composition: C 75.50%; H 12.67%; O 11.83%

Biological Source: Occurs widely in nature

Physical Description: Cryst. (C_6H_6 or Me_2CO)

Melting Point: Mp 60.3-60.5°

Sigma: M6531

>>Derivative: Me ester

CAS Registry Number: 6929-04-0

Molecular Formula: $\text{C}_{18}\text{H}_{36}\text{O}_2$

Molecular Weight: 284.481

Accurate Mass: 284.27153

Percentage Composition: C 76.00%; H 12.75%; O 11.25%

Physical Description: Liq.

Melting Point: Mp 18.3-18.9°

Boiling Point: Bp_{1.4} 151-153°

Sigma: M6656

>>Derivative: Et ester

Molecular Formula: $\text{C}_{19}\text{H}_{38}\text{O}_2$

Molecular Weight: 298.508

Accurate Mass: 298.28718

Percentage Composition: C 76.45%; H 12.83%; O 10.72%

Physical Description: Liq.

Boiling Point: Bp_{0.8} 162°

>>Derivative: Amide

Molecular Formula: $\text{C}_{17}\text{H}_{35}\text{NO}$

Molecular Weight: 269.47

Accurate Mass: 269.271864

Percentage Composition: C 75.77%; H 13.09%; N 5.20%; O 5.94%

Physical Description: Cryst. ($\text{EtOH}/\text{C}_6\text{H}_6$)

Melting Point: Mp 100.5-101°

References:

Weitzel, G. *et al.*, *Hoppe Seyler's Z. Physiol. Chem.*, 1951, **287**, 65, (*synth*)

Horn, D.H.S. *et al.*, *J.C.S.*, 1954, 177, (*synth*)

Hansen, A.E. *et al.*, *Biochem. J.*, 1955, **61**, 141, (*synth*)

Crossley, A.T. *et al.*, *Can. J. Chem.*, 1955, **33**, 1426, (*synth*)

Saito, K., *J. Biochem. (Tokyo)*, 1960, **47**, 710, (*isol*)

Ryhage, R., *J. Dairy Res.*, 1967, **34**, 115, (*synth, chromatog, ms*)

Ubik, K. *et al.*, *Coll. Czech. Chem. Comm.*, 1975, **40**, 2826, (*ms*)

Omura, S. *et al.*, *J. Antibiot.*, 1986, **39**, 1180, (*Aggreceide C*)

Carballeira, N. *et al.*, *J.O.C.*, 1986, **51**, 2751, (*isol, biosynth*)