



>>Entry Name: 10-Methylhexadecanoic acid, 9CI

Synonym(s): 10-Methylpalmitic acid

CAS Registry Number: 17001-26-2

Related CAS Registry Numbers(s): 2490-51-9

$\text{H}_3\text{C}(\text{CH}_2)_5\text{CH}(\text{CH}_3)(\text{CH}_2)_8\text{COOH}$

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: Constit. of animal, sponge and bacterial lipids

>>Variant: ($\pm$)-form

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%

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 24-24.5°

Boiling Point: Bp_{1.5} 189°

>>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: Bp₁ 163°

>>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. (EtOAc)

Melting Point: Mp 80.5-81°

References:

Weitzel, G. *et al.*, *Hoppe Seyler's Z. Physiol. Chem.*, 1951, **287**, 65; 296; **288**, 189, (*synth*)

Cason, J. *et al.*, *J. Biol. Chem.*, 1963, **238**, 883, (*isol*)

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

Ackman, R.G. *et al.*, *Lipids*, 1972, **7**, 683, (*chromatog*)

Raederstorff, D. *et al.*, *J.O.C.*, 1987, **52**, 2337