



>>Entry Name: 5-Hydroxytetradecanoic acid

Related CAS Registry Numbers(s): 92446-06-5

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

Molecular Formula: $\text{C}_{14}\text{H}_{28}\text{O}_3$

Molecular Weight: 244.373

Accurate Mass: 244.203845

Percentage Composition: C 68.81%; H 11.55%; O 19.64%

>>Variant: (±)-form

Molecular Formula: $\text{C}_{14}\text{H}_{28}\text{O}_3$

Molecular Weight: 244.373

Accurate Mass: 244.203845

Percentage Composition: C 68.81%; H 11.55%; O 19.64%

>>Derivative: Lactone

Synonym(s): Tetrahydro-6-nonyl-2*H*-pyran-2-one, 9Cl. 5-Tetradecanolide. δ-Tetradecalactone

CAS Registry Number: 2721-22-4

Molecular Formula: $\text{C}_{14}\text{H}_{26}\text{O}_2$

Molecular Weight: 226.358

Accurate Mass: 226.19328

Percentage Composition: C 74.29%; H 11.58%; O 14.14%

Biological Source: Found in coconut oil, butter, cheese, pork fat, tuberos oil and others (poss. in an enantiomeric form)

Physical Description: Liq.

Melting Point: Mp 14°

Boiling Point: Bp₁ 148°

Refractive Index: n_D^{25} 1.4592

Aldrich: W35900-9

References:

Allen, R.R., *Chem. Ind. (London)*, 1965, 1560, (*isol, ir*)

Landelli, G. *et al.*, *Rec. Trav. Chim. (J. R. Neth. Chem. Soc.)*, 1967, **86**, 481, (*synth*)

Ijima, J. *et al.*, *Chem. Pharm. Bull.*, 1973, **21**, 215, (*synth*)

Oser, B.L. *et al.*, *Food Technol. (Chicago)*, (2), 1978, **32**, 60; (2), 64; 68, (*rev, tox*)