



>>Entry Name: Undecafluorohexanoic acid, 9CI

Synonym(s): Perfluorohexanoic acid

CAS Registry Number: 307-24-4

$\text{F}_3\text{C}(\text{CF}_2)_4\text{COOH}$

Molecular Formula: $\text{C}_6\text{HF}_{11}\text{O}_2$

Molecular Weight: 314.055

Accurate Mass: 313.980088

Percentage Composition: C 22.95%; H 0.32%; F 66.54%; O 10.19%

Boiling Point: Bp 139°

Density: d_4^{20} 1.76

>>Derivative: Ph ester

CAS Registry Number: 308-14-5

Molecular Formula: $\text{C}_{12}\text{H}_5\text{F}_{11}\text{O}_2$

Molecular Weight: 390.153

Accurate Mass: 390.011388

Percentage Composition: C 36.94%; H 1.29%; F 53.56%; O 8.20%

Melting Point: Fp -18°

Boiling Point: Bp 196-197°

Density: d^{25} 1.53

Refractive Index: n_D^{25} 1.3715

>>Derivative: Anhydride

CAS Registry Number: 308-13-4

Molecular Formula: $\text{C}_{12}\text{F}_{22}\text{O}_3$

Molecular Weight: 610.095

Accurate Mass: 609.949611

Percentage Composition: C 23.62%; F 68.51%; O 7.87%

Boiling Point: Bp 175-176°

Density: d^{25} 1.77

References:

Clark, R.F. *et al.*, *J.A.C.S.*, 1953, **75**, 6305, (*anhydride, Ph ester*)

Holman, R.T. *et al.*, *Anal. Chem.*, 1956, **28**, 1533, (*ir*)

Battais, A. *et al.*, *J. Fluorine Chem.*, 1981, **19**, 35, (*synth, F-19 nmr*)

Huang, B.N. *et al.*, *J. Fluorine Chem.*, 1987, **36**, 49, (*synth*)