



>>Entry Name: Tridecafluorohexanesulfonic acid, 9Cl

Synonym(s): Perfluorohexanesulfonic acid

CAS Registry Number: 355-46-4

Related CAS Registry Numbers(s): 55120-77-9 82382-12-5

$\text{F}_3\text{C}(\text{CF}_2)_5\text{SO}_3\text{H}$

Molecular Formula: $\text{C}_6\text{HF}_{13}\text{O}_3\text{S}$

Molecular Weight: 400.117

Accurate Mass: 399.943879

Percentage Composition: C 18.01%; H 0.25%; F 61.73%; O 12.00%; S 8.01%

Physical Description: Oil

Boiling Point: Bp 238-239°. Bp₅ 110°

>>Derivative: K salt

CAS Registry Number: 3871-99-6

Physical Description: Cryst. ($\text{Me}_2\text{CO}/\text{CHCl}_3$)

Melting Point: Mp 272°

>>Derivative: Fluoride

CAS Registry Number: 423-50-7

Molecular Formula: $\text{C}_6\text{F}_{14}\text{O}_2\text{S}$

Molecular Weight: 402.108

Accurate Mass: 401.939542

Percentage Composition: C 17.92%; F 66.15%; O 7.96%; S 7.97%

Boiling Point: Bp 114°

>>Derivative: Chloride

CAS Registry Number: 55591-23-6

Molecular Formula: $\text{C}_6\text{ClF}_{13}\text{O}_2\text{S}$

Molecular Weight: 418.563

Accurate Mass: 417.909991

Percentage Composition: C 17.22%; Cl 8.47%; F 59.01%; O 7.64%; S 7.66%

Boiling Point: Bp₅₁ 72-73°

References:

Gramstad, T. *et al.*, *J.C.S.*, 1957, 2640, (*synth*)

Haszeldine, R.N. *et al.*, *J.C.S. Perkin I*, 1974, 1706, (*synth*)

Blancou, H. *et al.*, *Chem. Comm.*, 1976, 885, (*synth, chloride*)

Lyon, P.A. *et al.*, *Anal. Chem.*, 1985, **57**, 2984, (*ms*)