



>>Entry Name: 1-Pentadecanesulfonic acid, 9Cl, 8Cl

CAS Registry Number: 31169-63-8

Extra CAS Registry Numbers(s): 50858-36-1

$\text{H}_3\text{C}(\text{CH}_2)_{14}\text{SO}_3\text{H}$

Molecular Formula: $\text{C}_{15}\text{H}_{32}\text{O}_3\text{S}$

Molecular Weight: 292.482

Accurate Mass: 292.207215

Percentage Composition: C 61.60%; H 11.03%; O 16.41%; S 10.96%

>>Derivative: Na salt

CAS Registry Number: 5896-54-8

Use/Importance: Surfactant, emulsifying agent. Used in emulsion polym.

Other Data: Forms lamellar liq. cryst. mesophase in aq. soln. Kraft point 48°

>>Derivative: Ph ester

CAS Registry Number: 20755-22-0

Extra CAS Registry Numbers(s): 8064-70-8

Molecular Formula: $\text{C}_{21}\text{H}_{36}\text{O}_3\text{S}$

Molecular Weight: 368.58

Accurate Mass: 368.238515

Percentage Composition: C 68.43%; H 9.84%; O 13.02%; S 8.70%

Use/Importance: Used in admixture with the methylphenyl esters as plasticiser for PVC

>>Derivative: Amide

CAS Registry Number: 78235-12-8

Molecular Formula: $\text{C}_{15}\text{H}_{33}\text{NO}_2\text{S}$

Molecular Weight: 291.497

Accurate Mass: 291.223199

Percentage Composition: C 61.81%; H 11.41%; N 4.81%; O 10.98%; S 11.00%

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 100°

>>Derivative: *N*-Cyclohexylamide

CAS Registry Number: 117400-03-0

Molecular Formula: $\text{C}_{21}\text{H}_{43}\text{NO}_2\text{S}$

Molecular Weight: 373.642

Accurate Mass: 373.301449

Percentage Composition: C 67.51%; H 11.60%; N 3.75%; O 8.56%; S 8.58%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 76°

>>Derivative: *N*-Benzylamide

CAS Registry Number: 117400-04-1

Molecular Formula: $\text{C}_{22}\text{H}_{39}\text{NO}_2\text{S}$

Molecular Weight: 381.622

Accurate Mass: 381.270149

Percentage Composition: C 69.24%; H 10.30%; N 3.67%; O 8.38%; S 8.40%

Melting Point: Mp 95°

References:

Weil, J.K. *et al.*, *J.O.C.*, 1962, **27**, 2950-2952, (*synth*)

Weil, J.K. *et al.*, *J. Am. Oil Chem. Soc.*, 1963, **40**, 538-541, (*props*)

Gantseva, T. *et al.*, *Plaste Kautsch.*, 1980, **27**, 249-251, (*Ph ester, use*)

Beileryan, N.M., *Acta Polym.*, 1982, **33**, 339-344, (*rev, use*)

Barton, D.H.R. *et al.*, *Tetrahedron*, 1988, **44**, 1153-1158, (*amides, synth, pmr*)

Nesrullaev, A.N., *Mol. Cryst. Liq. Cryst. Sci. Technol., Sect. A*, 1992, **215**, 303-311, (*props*)