



>>Entry Name: 1,2-Ethanedisulfonic acid, 9Cl, 8Cl

CAS Registry Number: 110-04-3

Related CAS Registry Numbers(s): 5325-43-9
HOSO2CH2CH2SO2OH

Molecular Formula: C2H6O6S2

Molecular Weight: 190.198

Accurate Mass: 189.96058

Percentage Composition: C 12.63%; H 3.18%; O 50.47%; S 33.72%

Use/Importance: Used in the manuf. of hypnotics and sedatives

Physical Description: Needles (AcOH/Ac₂O)

Melting Point: Mp 104° (anhyd. form also given as 172-174°)

Solubility: V. sol. dioxan, sol. EtOH, Et₂O

Other Data: Dec. by H₂O

Sigma: E2144

>>Derivative: Dihydrate

CAS Registry Number: 5982-56-9

Physical Description: Cryst. (AcOH/Ac₂O)

Melting Point: Mp 111-112°

>>Derivative: Aniline salt

Physical Description: Cryst. (H₂O)

Melting Point: Mp 270 dec.°

>>Derivative: Di-Et ester

Molecular Formula: C6H14O6S2

Molecular Weight: 246.305

Accurate Mass: 246.02318

Percentage Composition: C 29.26%; H 5.73%; O 38.97%; S 26.04%

Physical Description: Prisms (EtOH or Et₂O)

Melting Point: Mp 77.5°

Solubility: V. sol. CHCl₃, C₆H₆, spar. sol. EtOH, Et₂O

>>Derivative: Dichloride

CAS Registry Number: 31469-08-6

Molecular Formula: C2H4Cl2O4S2

Molecular Weight: 227.089

Accurate Mass: 225.892804

Percentage Composition: C 10.58%; H 1.78%; Cl 31.22%; O 28.18%; S 28.24%

Physical Description: Needles (Et₂O) or plates (CHCl₃)

Melting Point: Mp 95° (91°)

Other Data: Dec. by H₂O

References:

Zuffanti, S. *et al.*, *J.A.C.S.*, 1941, **63**, 2999, (*synth*)

Blanksma, J.J., *Rec. Trav. Chim. (J. R. Neth. Chem. Soc.)*, 1946, **65**, 311, (*synth*)

Gilbert, E.E., *Sulfonation and Related Reactions*, Interscience, N.Y., 1965, (*rev*)

Trotyanskaya, E.B. *et al.*, *CA*, 1971, **74**, 99402, (*synth*)

Ger. Pat., 1975, 2 502 912; *CA*, **83**, 192824, (*synth*)