



>>Entry Name: Anthraquinone-1,5-disulfonic acid

Synonym(s): 9,10-Dihydro-9,10-dioxo-1,5-anthracenedisulfonic acid, 9Cl, 8Cl

CAS Registry Number: 117-14-6

Molecular Formula: C₁₄H₈O₈S₂

Molecular Weight: 368.344

Accurate Mass: 367.96606

Percentage Composition: C 45.65%; H 2.19%; O 34.75%; S 17.41%

Physical Description: Yellowish needles + 4H₂O (HCl)

Melting Point: Mp 310-311°

Solubility: V. sol. H₂O

Hazard & Toxicity: LD₅₀ (rat, orl) 2357 mg/kg

>>Derivative: Di-Na salt

CAS Registry Number: 853-35-0

Physical Description: Yellow leaflets (H₂O)

Solubility: Sol. H₂O

Hazard & Toxicity: Eye irritant

>>Derivative: Di-K salt

CAS Registry Number: 27690-02-4

Physical Description: Yellow leaflets (H₂O)

Solubility: Spar. sol. H₂O

>>Derivative: Dichloride

CAS Registry Number: 36003-92-6

Molecular Formula: C₁₄H₆Cl₂O₆S₂

Molecular Weight: 405.235

Accurate Mass: 403.898284

Percentage Composition: C 41.50%; H 1.49%; Cl 17.50%; O 23.69%; S 15.83%

Physical Description: Yellow needles (PhNO₂)

>>Derivative: Diamide

Molecular Formula: C₁₄H₁₀N₂O₆S₂

Molecular Weight: 366.375

Accurate Mass: 365.998028

Percentage Composition: C 45.90%; H 2.75%; N 7.65%; O 26.20%; S 17.50%

Melting Point: Mp 350°

References:

Fierz-David, H.E., *Helv. Chim. Acta*, 1927, **10**, 202, (*synth*)

U.S. Pat., 1929, 1 721 317; *CA*, **23**, 4230, (*synth*)

Lauer, K., *J. Prakt. Chem.*, 1931, **130**, 185, (*synth*)

U.K. Pat., 1970, 1 214 256; *CA*, **75**, 65301s, (*synth*)

Hunter, A. *et al.*, *J. Chromatogr.*, 1985, **319**, 319, (*hplc*)

Gamage, R.S.K.A. *et al.*, *Aust. J. Chem.*, 1993, **46**, 1595, (*cryst struct*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, APK625; DLJ700