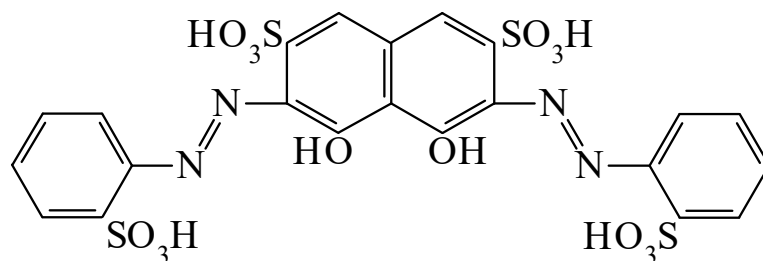




>>Entry Name: 4,5-Dihydroxy-3,6-bis[(2-sulphophenyl)azo]-2,7-naphthalenedisulfonic acid, 9Cl

Synonym(s): Sulfonazo III. Orthanilic S



CAS Registry Number: 1738-02-9

Related CAS Registry Numbers(s): 68504-35-8

Molecular Formula: $C_{22}H_{16}N_4O_{14}S_4$

Molecular Weight: 688.651

Accurate Mass: 687.954586

Percentage Composition: C 38.37%; H 2.34%; N 8.14%; O 32.53%; S 18.63%

Use/Importance: Used as 1mM aq. soln. for photometric detn. of Ba ($\lambda_{\max}$ 642 nm, ϵ 64500), Sr, rare earth elements, $SO_4^{2(-)}$, K, Na, Pb

Physical Description: Dark purple cryst. powder

Melting Point: Mp 222 dec.°

Solubility: Sol. H_2O , EtOH, acids

pKa Value: pK_{a1} 10.92; pK_{a2} 14.97

Fluka: 86170

Sigma: S6381

References:

Budeřinsky, B. *et al.*, *Fresenius' Z. Anal. Chem.*, 1965, **210**, 161, (*synth, detn, Ba, $SO_4^{2(-)}$*)

Slovak, Z. *et al.*, *Talanta*, 1968, **15**, 831, (*detn, Ba*)

Savvin, S.B. *et al.*, *Zh. Anal. Khim.*, 1968, **23**, 653; 1971, **26**, 1677, (*pKa*)

Savvin, S.B. *et al.*, *Organicheskiye Reagenty Gruppy Arsenazo III*, Atomizdat, Moscow, 1971, (*use*)

Kemp, P.J. *et al.*, *Anal. Chem.*, 1973, **45**, 124, (*detn, Sr, Ba*)

Kharzeeva, S.E. *et al.*, *Zh. Anal. Khim.*, 1979, **34**, 1022, (*detn, rare earths*)

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