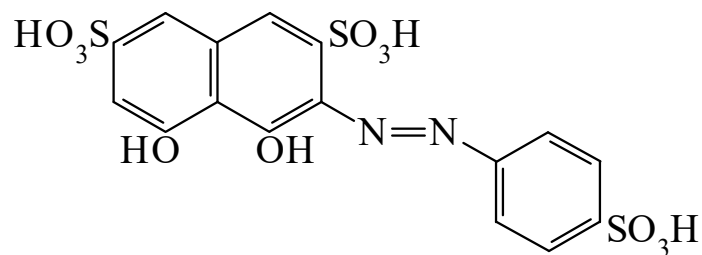




>>Entry Name: 4,5-Dihydroxy-3-[(4-sulfophenyl)azo]-2,7-naphthalenedisulfonic acid

Synonym(s): 2-(4-Sulfophenylazo)chromotropic acid. SPADNS



Molecular Formula: C₁₆H₁₂N₂O₁₁S₃

Molecular Weight: 504.476

Accurate Mass: 503.960323

Percentage Composition: C 38.09%; H 2.40%; N 5.55%; O 34.89%; S 19.07%

>>Derivative: Tri-Na salt

CAS Registry Number: 23647-14-5

Type of Compound Code(s): PA0450 PA1520 PA5010 PS8300 PM6100

Use/Importance: Used as 0.02% aq. soln. for photometric detn. of Al, B, Th, Zr, Sc, F⁽⁻⁾ (with Zr)

Physical Description: Brown cryst. powder

Solubility: Sol H₂O, EtOH

Aldrich: 11475-8

Fluka: 86100

Sigma: S9256

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 510B, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **2**, 830B, (*nmr*)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 669

Banerjee, G., *Fresenius' Z. Anal. Chem.*, 1955, **146**, 417; **147**, 105, (*synth, detn, Th, Zr*)

Cooper, J.A. *et al.*, *Anal. Chim. Acta*, 1960, **23**, 351, (*detn, Th*)

Kelso, F.S. *et al.*, *Anal. Chem.*, 1964, **36**, 577, (*detn, F*)

Truhaut, R. *et al.*, *Bull. Soc. Chim. Fr.*, 1966, 2551, (*detn, B*)