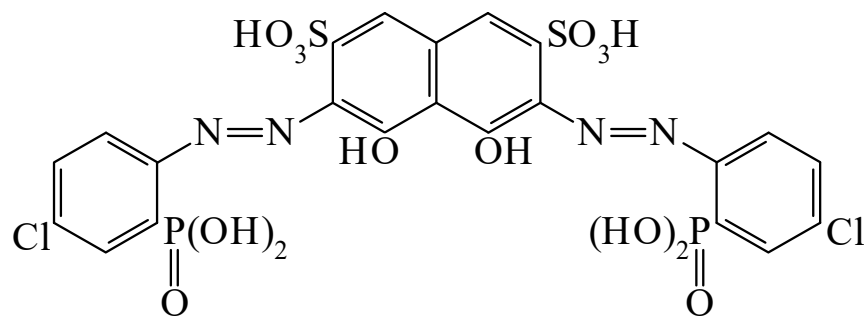




>>Entry Name: Chlorophosphonazo III

Synonym(s): 3,6-Bis(4-chloro-2-phosphonophenyl)azo-4,5-dihydroxy-2,7-naphthalenedisulfonic acid, 9Cl



CAS Registry Number: 1914-99-4

Molecular Formula: C₂₂H₁₆Cl₂N₄O₁₄P₂S₂

Molecular Weight: 757.372

Accurate Mass: 755.895674

Percentage Composition: C 34.89%; H 2.13%; Cl 9.36%; N 7.40%; O 29.57%; P 8.18%; S 8.47%

Use/Importance: Used for photometric detn. of Ba, Zr, Mg, Sc, Sr, Ti, Th ($\lambda_{\max}$ 620 nm, ϵ 120000), U, Ca ($\lambda_{\max}$ 668 nm, ϵ 54000)

Physical Description: Dark violet cryst. powder

Solubility: Sol. H₂O; sl. sol. EtOH

Other Data: Usually supplied as disodium salt

Fluka: 26049

Sigma: C4275

>>Derivative: Dianilide

Synonym(s): Chlorophosphonazo DAL. [[1,8-Dihydroxy-3,6-bis[(phenylamino)sulfonyl]-2,7-naphthalenediyl]bis[azo(5-chloro-2,1-phenylene)]]diphosphonic acid, 9Cl.
3,6-Bis(*p*-chloro-*o*-phosphonophenylazo)chromotropic acid dianilide

CAS Registry Number: 16782-24-4

Molecular Formula: C₃₄H₂₆Cl₂N₆O₁₂P₂S₂

Molecular Weight: 907.597

Accurate Mass: 905.990242

Percentage Composition: C 45.00%; H 2.89%; Cl 7.81%; N 9.26%; O 21.15%; P 6.83%; S 7.07%

Use/Importance: Used as a 0.01% soln. in butanol for photometric detn. of lanthanides

Physical Description: Dark cryst. powder

Solubility: Sol. H₂O, butanol

References:

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Bykhovtsova, T.T. *et al.*, *Zh. Anal. Khim.*, 1982, **37**, 624, (*detn, Sc*)

Burba, P. *et al.*, *Fresenius' Z. Anal. Chem.*, 1984, **318**, 1, (*detn, U*)

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