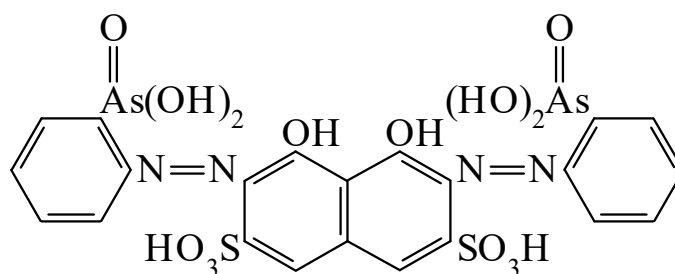




>>Entry Name: Arsenazo III

Synonym(s): 3,6-Bis[(2-arsonophenyl)azo]-4,5-dihydroxy-2,7-naphthalenedisulfonic acid, 9Cl. *o*-(1,8-Dihydroxy-3,6-disulfonaphthalene-2,7-bisazo)bisbenzenearsonic acid



CAS Registry Number: 1668-00-4

Related CAS Registry Numbers(s): 62337-00-2

Molecular Formula: C₂₂H₁₈As₂N₄O₁₄S₂

Molecular Weight: 776.378

Accurate Mass: 775.869284

Percentage Composition: C 34.04%; H 2.34%; As 19.30%; N 7.22%; O 28.85%; S 8.26%

Source/Synthesis: Synth. from diaz-*o*-aminophenylarsonic acid and chromotropic acid

Use/Importance: Used as 0.05% aq. soln. in photometric detn. of Th ($\lambda_{\max}$ 655 nm, ϵ 115000), Zr, Hf (ϵ 120000, 9M HCl), U(IV) (ϵ 127000, 6-8M HCl), rare earth elements, Sc, Cr, Bi, Cd, Zn, Ca, Pd

Physical Description: Dark red cryst. powder

Melting Point: Mp 320°

Solubility: Sol. alkalis; spar. sol. H₂O; insol. EtOH, Et₂O

Hazard & Toxicity: Toxic

Aldrich: A9277-5

Sigma: A4657

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