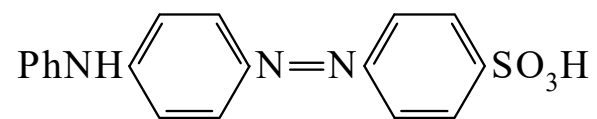




>>Entry Name: 4'-Anilinoazobenzene-4-sulfonic acid

Synonym(s): 4-[[4-(Phenylamino)phenyl]azo]benzenesulfonic acid, 9Cl. Orange IV. Tropaeolin OO. C.I. Acid orange 5. C.I. 13080



CAS Registry Number: 17040-79-8

Molecular Formula: C₁₈H₁₅N₃O₃S

Molecular Weight: 353.401

Accurate Mass: 353.083412

Percentage Composition: C 61.18%; H 4.28%; N 11.89%; O 13.58%; S 9.07%

General Statement: Strictly, the name Orange IV applies to the sodium salt

Sigma: A2671

>>Derivative: Na salt

CAS Registry Number: 554-73-4

Use/Importance: Used as a 0.04% soln. in aq. EtOH for extraction-photometric detn. of K ($\lambda_{\max}$ 450 nm), photometric detn. of Mg, detn. of Zn, titrimetric detn. of organic acids, acid-base indicator (pH range: 1.3-3.2; colour change: red → yellow); redox indicator

Physical Description: Orange-yellow cryst.

Solubility: Sol. H₂O, EtOH; spar. sol. Et₂O; insol. C₆H₆

Fluka: 93530

Rare Chemicals Library: S57049-4

Sigma: O3502

References:

Witt, O.N., *Ber.*, 1879, **12**, 258, (*synth*)

Suten, A. *et al.*, *CA*, 1972, **77**, 172202y, (*redox indicator*)

Bishop, E., *Indicators*, Pergamon, Oxford, 1972, (*detn. Mg, Zn, organic acids, acid-base indicator*)

Nazarenko, A.Y. *et al.*, *Zh. Anal. Khim.*, 1981, **36**, 1719, (*detn. K*)