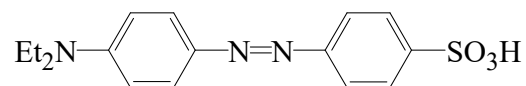




>>Entry Name: Ethyl orange

Synonym(s): 4-[[4-(Diethylamino)phenyl]azo]benzenesulfonic acid



CAS Registry Number: 6287-12-3

Related CAS Registry Numbers(s): 13545-67-0

Molecular Formula: C₁₆H₁₉N₃O₃S

Molecular Weight: 333.41

Accurate Mass: 333.114712

Percentage Composition: C 57.64%; H 5.74%; N 12.60%; O 14.40%; S 9.62%

General Statement: Strictly the name Ethyl orange refers to the K or Na salts

pKa Value: pK_a 2.55

>>Derivative: Na salt

CAS Registry Number: 62758-12-7

Molecular Formula: C₁₆H₁₈N₃NaO₃S

Molecular Weight: 355.392

Accurate Mass: 355.096654

Percentage Composition: C 54.07%; H 5.10%; N 11.82%; Na 6.47%; O 13.51%; S 9.02%

Other Data: Acid-base indicator (pH range (H₂O) 3.5-4.5; colour change pink→yellow)

References:

Goldschmidt, H. *et al.*, *Ber.*, 1897, **30**, 2075-2093, (*synth*)

Cray, F.M. *et al.*, *Trans. Faraday Soc.*, 1925, **21**, 326-337, (*props*)

Klotz, I.M. *et al.*, *J.A.C.S.*, 1952, **74**, 202-208, (*synth*)