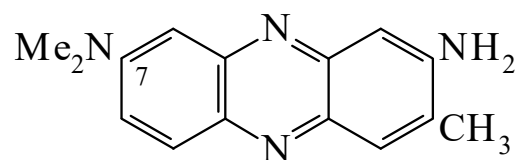




>>>Entry Name: Neutral red

Synonym(s): $N^8, N^8, 3$ -Trimethyl-2,8-phenazinediamine, 9Cl. C.I. Basic red 5. Toluylene red. C.I. 50040. Nuclear fast red (basic dye)



CAS Registry Number: 366-13-2

Molecular Formula: $C_{15}H_{16}N_4$

Molecular Weight: 252.318

Accurate Mass: 252.137496

Percentage Composition: C 71.40%; H 6.39%; N 22.20%

>>>Derivative: Hydrochloride

CAS Registry Number: 553-24-2

Use/Importance: Histological stain used as 0.1% aq. soln. as indicator in bromatometric titrimetric detn. of As(III); acid-base indicator (pH range: 6.8-8.0; colour change: orange $\rightarrow$ yellow); photometric detn. of Cl^m , Hg(II), $SCN^{(-)}$, $ClO_4^{(-)}$, $I^{(-)}$ (λ_{max} 552 nm, ϵ 3300, $CHCl_3$)

Physical Description: Black or v. dark green powder

Melting Point: Mp 290 dec. $^{\circ}$

Solubility: Sol. H_2O , EtOH

Other Data: λ_{max} 540 nm. E° -0.34V (pH 7)

Aldrich: 19859-5

Fluka: 72210

Rare Chemicals Library: S58274-3

Sigma: N7005

References:

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Sigma-Aldrich Library of Stains, Dyes and Indicators, 504

Tsubouchi, M., *Anal. Chim. Acta*, 1971, **54**, 143, (detn, $SCN^{(-)}$, $ClO_4^{(-)}$, Hg)

Colour Index, 3rd Ed., 1971, **4**, 4446, (synth)

Bishop, E., *Indicators*, Pergamon, Oxford, 1972, (detn, $I^{(-)}$, ind)

Venkateswara Rao, N. *et al.*, *Fresenius' Z. Anal. Chem.*, 1977, **285**, 125, (detn, As)

Ramana, P.V. *et al.*, *J. Indian Chem. Soc.*, 1980, **57**, 235, (detn, As)

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