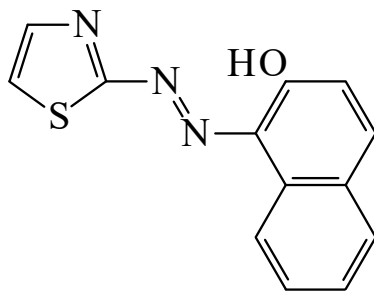




>>Entry Name: 1-(2-Thiazolylazo)-2-naphthalenol, 9CI

Synonym(s): 2-(2-Hydroxy-1-naphthylazo)thiazole. TAN



CAS Registry Number: 1147-56-4

Molecular Formula: C₁₃H₉N₃OS

Molecular Weight: 255.3

Accurate Mass: 255.046632

Percentage Composition: C 61.16%; H 3.55%; N 16.46%; O 6.27%; S 12.56%

Use/Importance: Used as 0.1% soln. in EtOH for extraction-photometric detn. of Cd, Co, Cu, Mn, Ni, Tl(III) ($\lambda_{\max}$ 580 nm, ϵ 35000), U(VI), Zn; indicator in EDTA titrations

Physical Description: Orange needles

Melting Point: Mp 139-141°

Solubility: Sol. EtOH, Me₂CO, CHCl₃; sl. sol. H₂O

pKa Value: pK_a 8.71

Fluka: 88413

Rare Chemicals Library: S45927-5

Sigma: T1769

References:

Jensen, B.S., *Acta Chem. Scand.*, 1960, **14**, 927, (*synth, use*)

Navratil, O., *Coll. Czech. Chem. Comm.*, 1964, **29**, 2490, (*use*)

Kawase, K., *Talanta*, 1965, **12**, 195, (*detn, Zn*)

Navratil, O. *et al.*, *Anal. Chim. Acta*, 1970, **52**, 221, (*detn, Co*)

Gusev, S.I. *et al.*, *Zh. Anal. Khim.*, 1974, **29**, 1535, (*detn, Tl*)