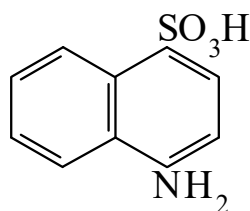




>>Entry Name: 4-Amino-1-naphthalenesulfonic acid, 9Cl

Synonym(s): 1-Naphthylamine-4-sulfonic acid. Naphthionic acid



CAS Registry Number: 84-86-6

Related CAS Registry Numbers(s): 123333-48-2

Molecular Formula: C₁₀H₉NO₃S

Molecular Weight: 223.252

Accurate Mass: 223.030314

Percentage Composition: C 53.80%; H 4.06%; N 6.27%; O 21.50%; S 14.36%

Use/Importance: Dyestuff intermediate

Biological Use/Importance: Haemostatic agent

Physical Description: Needles + ½ H₂O (H₂O)

Solubility: Spar. sol. H₂O with blue fluor., sol. MeOH

pKa Value: pK_a 2.68 (25°)

Other Data: Na salt used as haemostatic agent

Hazard & Toxicity: LD₅₀ (mus, ipr) 300 mg/kg

Aldrich: 25061-9

Fluka: 70790

Rare Chemicals Library: S57090-7

>>Derivative: Na salt

CAS Registry Number: 130-13-2

Use/Importance: Used as an aq. soln. as acid-base fluorescent indicator (pH range: 3-4; colour change: non fl.→blue; pH range: 10-12; colour change: blue→yellow-green)

Physical Description: Needles (H₂O)

Fluka: 70862

>>Derivative: Amide

Synonym(s): 4-Amino-1-naphthalenesulfonamide. Naphthionamide

CAS Registry Number: 5695-34-1

Molecular Formula: C₁₀H₁₀N₂O₂S

Molecular Weight: 222.267

Accurate Mass: 222.046298

Percentage Composition: C 54.04%; H 4.53%; N 12.60%; O 14.40%; S 14.43%

Use/Importance: Used as 0.05% soln. in EtOH as acid-base fluorescent indicator (pH range: 9.5-13.0, colour change: dark blue → white/blue)

Physical Description: Cryst.

Melting Point: Mp 241°

pKa Value: pK_{a2} 10.71 (25°)

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 507C, (ir)

Langguth, S., *Chim. Ind. (Paris)*, 1930, **24**, 31; *CA*, **24**, 5035, (synth)

Caullet, C. *et al.*, *CA*, 1967, **67**, 58864, (ir)

Mayer, J. *et al.*, *Bull. Soc. Chim. Fr.*, 1971, 4129, (pKa)

Kracmar, J. *et al.*, *Pharmazie*, 1971, **26**, 155, (uv)

Bishop, E., *Indicators*, Pergamon, Oxford, 1972, 689, (use, ind)

Franc, J. *et al.*, *J. Chromatogr.*, 1979, **170**, 89, (chromatog)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn.*, Van Nostrand Reinhold, 1992, ALI000