



>>Entry Name: **5-Amino-2-naphthalenesulfonic acid**, 9CI
Synonym(s): 1-Naphthylamine-6-sulfonic acid. Cleve's acid

CAS Registry Number: 119-79-9

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, low acute mammalian toxicity

Physical Description: Needles + 2H₂O

Solubility: V. spar. sol. H₂O

pKa Value: pK_a 3.71 (25°)

Hazard & Toxicity: Eye irritant

Aldrich: 28507-2

Rare Chemicals Library: S57906-8

Sigma: A2389

>>Derivative: Na salt

CAS Registry Number: 28907-84-8

Physical Description: Cryst. + 2H₂O or plates + 4½ H₂O

Solubility: Sol. H₂O with blue fluor.

Hazard & Toxicity: Exp. reprod. and teratogenic effects

>>Derivative: Amide

Synonym(s): 5-Amino-2-naphthalenesulfonamide

CAS Registry Number: 13261-51-3

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: Acid base fluorescent indicator (pH range 1.9-3.9, colour change: no fluorescence → green; pH range 9.6-13.0, colour change: green → no fluorescence). Used as a 0.05% soln. in aq. EtOH

Melting Point: Mp 218-219 dec.°

pKa Value: pK_{a2} 10.27 (25°)

References: