



>>Entry Name: 5-Amino-1-naphthalenesulfonic acid, 9Cl
Synonym(s): 1-Naphthylamine-5-sulfonic acid. Laurent's acid

CAS Registry Number: 84-89-9

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
Physical Description: Needles + 1H₂O
pKa Value: pK_a 3.62 (25°)
Other Data: Fairly readily oxid. acid and salts colour in moist air

Fluka: 70800
Rare Chemicals Library: S57908-4

>>Derivative: S-Benzylthiuronium salt

Melting Point: Mp 179°

>>Derivative: Amide
Synonym(s): 5-Amino-1-naphthalenesulfonamide

CAS Registry Number: 32327-47-2

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 a 0.05% soln. in aq. EtOH as acid-base fluorescent indicator (pH range: 2.0-4.0. colour change; no fluorescence → yellow-orange; pH range: 9.5-13.0, colour change; yellow-orange → no fluorescence)
Melting Point: Mp 241° (259-260°)
pKa Value: pK_{a2} 10.16 (25°)

>>Derivative: N,N-Di-Me
Synonym(s): 5-Dimethylamino-1-naphthalenesulfonic acid. Dansic acid

CAS Registry Number: 4272-77-9
Molecular Formula: C₁₂H₁₃NO₃S
Molecular Weight: 251.306
Accurate Mass: 251.061614
Percentage Composition: C 57.35%; H 5.21%; N 5.57%; O 19.10%; S 12.76%
Use/Importance: The acid and its derivs. cont. the fluorescent dansyl chromophore and are used in fluorimetric analysis
Physical Description: Leaflets + 1H₂O
Other Data: Green fluor. in soln.
Aldrich: 19434-4
Sigma: D7882

>>Derivative: N,N-Di-Me, chloride
see 5-(Dimethylamino)-1-naphthalenesulfonyl chloride, [FNS92-C](#)