>>**Entry Name: 8-Amino-2-naphthalenesulfonic acid,** 9CI
Synonym(s): 1-Naphthylamine-7-sulfonic acid. Cleve's O-acid

CAS Registry Number: 119-28-8

Molecular Formula: $C_{10}H_9NO_3S$
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. Used as a 0.07-0.3% soln. in dil. AcOH for photometric detn. of $NO_2^{(-)}$
Physical Description: Flakes + $1H_2O$
Solubility: Mod. sol. H_2O
pKa Value: pK_a 3.64 (25°)

Aldrich: 28461-0
Fluka: 70820
Sigma: A7782

>>**Derivative:** Na salt

CAS Registry Number: 6322-37-8
Physical Description: Needles + ½ H_2O
Solubility: Sol. H_2O
pKa Value: pK_{a1} 2.9; pK_{a2} 10.2 (25°)

>>**Derivative:** Amide
Synonym(s): 8-Amino-2-naphthalenesulfonamide

CAS Registry Number: 13261-52-4

Molecular Formula: $C_{10}H_{10}N_2O_2S$
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 1.9-3.9, colour change: no fluorescence → green; pH range 9.6-13.0, colour change: green → no fluorescence); used as 0.05% soln. in 90% EtOH
Physical Description: Needles + 1½H_2O
Melting Point: Mp 181°

References:

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Tomicek, O., *Coll. Czech. Chem. Comm.*, 1948, **13**, 116, *(use, ind)*
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Schriever, K. *et al.*, *Chem. Ber.*, 1958, **91**, 414
Bunton, N.G. *et al.*, *Analyst (London)*, 1969, **94**, 585, *(detn, $NO_2^{(-)}$)*
Mayer, J. *et al.*, *Bull. Soc. Chim. Fr.*, 1971, 4129, *(pKa)*
Bishop, E., *Indicators*, Pergamon, Oxford, 1972, 689, *(use, ind)*
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