



>>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: 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. Used as a 0.07-0.3% soln. in dil. AcOH for photometric detn. of NO₂⁽⁻⁾

Physical Description: Flakes + 1H₂O

Solubility: Mod. sol. H₂O

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 H₂O

Solubility: Sol. H₂O

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: 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 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 + 1½H₂O

Melting Point: Mp 181°

References: