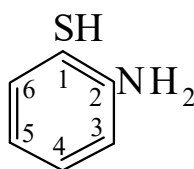




>>Entry Name: 2-Aminobenzenethiol, 9CI

Synonym(s): *o*-Aminophenyl mercaptan. *o*-Aminothiophenol. *o*-Mercaptoaniline



CAS Registry Number: 137-07-5

Molecular Formula: C₆H₇NS

Molecular Weight: 125.194

Accurate Mass: 125.029919

Percentage Composition: C 57.56%; H 5.64%; N 11.19%; S 25.61%

Use/Importance: Use in extraction-photometric detn. of Mo (CHCl₃), and as an indicator in potentiometric acid-base titrations

Physical Description: Needles

Melting Point: Mp 26°

Boiling Point: Bp 234°. Bp₄ 94-97°. Bp₆ 125-127°

pKa Value: pK_{a1} 3; pK_{a2} 6.59 (20°)

Aldrich: 27424-0

Fluka: 9490

Sigma: A5661

>>Derivative: Hydrochloride

CAS Registry Number: 3292-42-0

Physical Description: Cryst. (H₂O)

Melting Point: Mp 217°

>>Derivative: *N*-Ac

Molecular Formula: C₈H₉NOS

Molecular Weight: 167.231

Accurate Mass: 167.040484

Percentage Composition: C 57.46%; H 5.42%; N 8.38%; O 9.57%; S 19.17%

Melting Point: Mp 114.5-115.5°

>>Derivative: *N,S*-Di-Ac

Molecular Formula: C₁₀H₁₁NO₂S

Molecular Weight: 209.268

Accurate Mass: 209.051049

Percentage Composition: C 57.40%; H 5.30%; N 6.69%; O 15.29%; S 15.32%

Physical Description: Rods (EtOH)

Melting Point: Mp 135°

>>Derivative: *N*-Me

Synonym(s): 2-(Methylamino)benzenethiol

CAS Registry Number: 21749-63-3

Molecular Formula: C₇H₉NS

Molecular Weight: 139.221

Accurate Mass: 139.045569

Percentage Composition: C 60.39%; H 6.52%; N 10.06%; S 23.03%

Use/Importance: Used for selective protection of carbonyl groups. Used in protection of aldehydes and ketones

Boiling Point: Bp₁₈ 126-127°. Bp₁₂ 115-120°

>>Derivative: *N*-Et

CAS Registry Number: 1074-18-6

Molecular Formula: C₈H₁₁NS

Molecular Weight: 153.248

Accurate Mass: 153.061219

Percentage Composition: C 62.70%; H 7.23%; N 9.14%; S 20.92%

Boiling Point: Bp₂₀ 129-130°