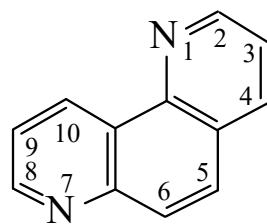




>>Entry Name: 1,7-Phenanthroline, 9Cl

Synonym(s): *m*-Phenanthroline. 1,5-Diazaphenanthrene



CAS Registry Number: 230-46-6

Extra CAS Registry Numbers(s): 12678-01-2

Molecular Formula: C₁₂H₈N₂

Molecular Weight: 180.209

Accurate Mass: 180.068748

Percentage Composition: C 79.98%; H 4.47%; N 15.54%

Physical Description: Needles

Melting Point: Mp 65.5° (anhyd. 78-78.5°)

pKa Value: pK_{a1} 4; pK_{a2} 1 (20°, 0.2M KCl)

Aldrich: 30184-1

>>Derivative: 7-*N*-Oxide

CAS Registry Number: 42948-68-5

Molecular Formula: C₁₂H₈N₂O

Molecular Weight: 196.208

Accurate Mass: 196.063663

Percentage Composition: C 73.46%; H 4.11%; N 14.28%; O 8.15%

Physical Description: Yellow needles (H₂O)

Melting Point: Mp 188°

>>Derivative: 1,7-Di-*N*-oxide

CAS Registry Number: 42948-69-6

Molecular Formula: C₁₂H₈N₂O₂

Molecular Weight: 212.207

Accurate Mass: 212.058578

Percentage Composition: C 67.92%; H 3.80%; N 13.20%; O 15.08%

Physical Description: Pale yellow cryst. (H₂O)

Melting Point: Mp 192°. Mp 223-224°

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