



>>Entry Name: 1-Phenylsemicarbazide

Synonym(s): 2-Phenylhydrazinecarboxamide, 9Cl. **Phenicarbazide**, INN. 1-Carbamyl-2-phenylhydrazine. Carbaphen. **Cryogenine**‡. Kryogenin. Phenygenine

CAS Registry Number: 103-03-7



Molecular Formula: C₇H₉N₃O

Molecular Weight: 151.168

Accurate Mass: 151.074562

Percentage Composition: C 55.62%; H 6.00%; N 27.80%; O 10.58%

Use/Importance: Antipyretic, analgesic

Physical Description: Leaflets (H₂O or EtOH aq.)

Melting Point: Mp 172°

Calculated Log P Data: Log P 0.12 (calc)

Hazard & Toxicity: Exp. neoplastic agent

Aldrich: 24590-9

Fluka: 79140

Rare Chemicals Library: S57315-9

>>Derivative: 4-*N*-Ac

Molecular Formula: C₉H₁₁N₃O₂

Molecular Weight: 193.205

Accurate Mass: 193.085127

Percentage Composition: C 55.95%; H 5.74%; N 21.75%; O 16.56%

Physical Description: Plates (EtOH)

Melting Point: Mp 196-197 dec.°

>>Derivative: 1-*N*-Me

CAS Registry Number: 65119-31-5

Molecular Formula: C₈H₁₁N₃O

Molecular Weight: 165.194

Accurate Mass: 165.090212

Percentage Composition: C 58.17%; H 6.71%; N 25.44%; O 9.69%

Melting Point: Mp 154-155°

>>Derivative: 1-*N*-Et

CAS Registry Number: 20049-87-0

Molecular Formula: C₉H₁₃N₃O

Molecular Weight: 179.221

Accurate Mass: 179.105862

Percentage Composition: C 60.32%; H 7.31%; N 23.45%; O 8.93%

Physical Description: Plates (EtOH aq.)

Melting Point: Mp 151°

>>Derivative: 1-*N*-Et, 4-*N*-nitroso

Molecular Formula: C₉H₁₂N₄O₂

Molecular Weight: 208.219

Accurate Mass: 208.096026

Percentage Composition: C 51.92%; H 5.81%; N 26.91%; O 15.37%

Physical Description: Yellow needles (Me₂CO)

Melting Point: Mp 86.5 dec.°

References: