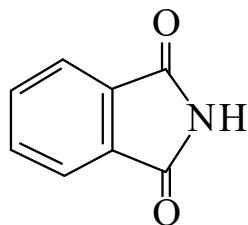




>>Entry Name: Phthalimide, 8Cl

Synonym(s): 1*H*-Isoindole-1,3(2*H*)-dione, 9Cl



CAS Registry Number: 85-41-6

Molecular Formula: C₈H₅NO₂

Molecular Weight: 147.133

Accurate Mass: 147.032029

Percentage Composition: C 65.31%; H 3.43%; N 9.52%; O 21.75%

Use/Importance: Source of "protected" ammonia in primary amine synth. (Gabriel)

Physical Description: Needles (H₂O), prisms (AcOH); leaflets by subl.

Melting Point: Mp 238°

Solubility: Insol. C₆H₆, petrol

Other Data: Forms salts with bases

Hazard & Toxicity: LD₅₀ (mus, orl) 5000 mg/kg. Exp. reprod. and teratogenic effects

Aldrich: P3970-2

Fluka: 79780

Sigma: P3639

>>Derivative: K salt

Synonym(s): Potassium phthalimide

CAS Registry Number: 1074-82-4

Extra CAS Registry Numbers(s): 53510-88-6

Molecular Formula: C₈H₄KNO₂

Molecular Weight: 185.223

Accurate Mass: 184.987911

Percentage Composition: C 51.88%; H 2.18%; K 21.11%; N 7.56%; O 17.28%

Source/Synthesis: Synth. from phthalimide and e.g. KOH

Use/Importance: Intermed. for syntheses. Used in subst. of org. halides, followed by removal of phthaloyl protecting group (i.e. Gabriel synth. of primary amines)

Physical Description: Cryst. (EtOH)

Melting Point: Mp 300°

Aldrich: 16038-5

Fluka: 79790

Sigma: P3764

>>Derivative: Monoxime

CAS Registry Number: 29833-90-7

Molecular Formula: C₈H₆N₂O₂

Molecular Weight: 162.148

Accurate Mass: 162.042928

Percentage Composition: C 59.26%; H 3.73%; N 17.28%; O 19.73%

Use/Importance: Gives colour reactions with Ag, Au, Co, Cr, Cu, Fe, Mn, Ni, Pd, Rh

Physical Description: Cryst.

Melting Point: Mp 264-266°

Solubility: Spar. sol. H₂O, Me₂CO, EtOH; insol. CHCl₃

>>Derivative: Dioxime

CAS Registry Number: 4741-70-2

Molecular Formula: C₈H₇N₃O₂

Molecular Weight: 177.162

Accurate Mass: 177.053827

Percentage Composition: C 54.24%; H 3.98%; N 23.72%; O 18.06%

Physical Description: Prisms (2-propanol)

Melting Point: Mp 261° (dec.)