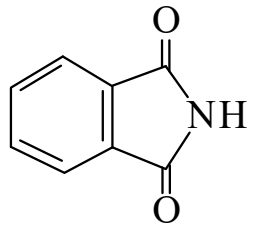
>>**Entry Name: Phthalimide,** 8CI
Synonym(s): 1*H*-Isoindole-1,3(2*H*)-dione, 9CI



CAS Registry Number: 85-41-6

Molecular Formula: $C_8H_5NO_2$
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 (H_2O), prisms (AcOH); leaflets by subl.
Melting Point: Mp 238°
Solubility: Insol. C_6H_6, petrol
Other Data: Forms salts with bases
Hazard & Toxicity: LD_{50} (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: $C_8H_4KNO_2$
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. form 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: $C_8H_6N_2O_2$
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. H_2O, Me_2CO, EtOH; insol. $CHCl_3$

>>**Derivative:** Dioxime

CAS Registry Number: 4741-70-2
Molecular Formula: $C_8H_7N_3O_2$
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.)