>>**Entry Name: 2,4-Dinitrobenzoic acid,** 9CI, 8CI

CAS Registry Number: 610-30-0
Structure by analogy with 2,3-Dinitrobenzoic acid, FBC63-M

Molecular Formula: $C_7H_4N_2O_6$
Molecular Weight: 212.118
Accurate Mass: 212.006938
Percentage Composition: C 39.64%; H 1.90%; N 13.21%; O 45.26%
Use/Importance: Used in photography
Melting Point: Mp 182-183°
pKa Value: pK_a 1.43 (25°, H_2O)

Aldrich: 13795-2
Fluka: 41910
Rare Chemicals Library: S43081-1
Sigma: D4914

>>**Derivative:** Me ester

CAS Registry Number: 18959-17-6
Molecular Formula: $C_8H_6N_2O_6$
Molecular Weight: 226.145
Accurate Mass: 226.022588
Percentage Composition: C 42.49%; H 2.67%; N 12.39%; O 42.45%
Melting Point: Mp 70°

>>**Derivative:** Chloride

CAS Registry Number: 20195-22-6
Molecular Formula: $C_7H_3ClN_2O_5$
Molecular Weight: 230.564
Accurate Mass: 229.97305
Percentage Composition: C 36.47%; H 1.31%; Cl 15.38%; N 12.15%; O 34.70%
Melting Point: Mp 42-46°

>>**Derivative:** Amide

CAS Registry Number: 13296-87-2
Molecular Formula: $C_7H_5N_3O_5$
Molecular Weight: 211.134
Accurate Mass: 211.022922
Percentage Composition: C 39.82%; H 2.39%; N 19.90%; O 37.89%
Physical Description: Greenish needles
Melting Point: Mp 203-204°

>>**Derivative:** Nitrile
Synonym(s): 1-Cyano-2,4-dinitrobenzene

CAS Registry Number: 4110-33-2
Molecular Formula: $C_7H_3N_3O_4$
Molecular Weight: 193.118
Accurate Mass: 193.012357
Percentage Composition: C 43.54%; H 1.57%; N 21.76%; O 33.14%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 104-105°

>>**Derivative:** Anhydride

Molecular Formula: $C_{14}H_6N_4O_{11}$
Molecular Weight: 406.222
Accurate Mass: 406.003311
Percentage Composition: C 41.39%; H 1.49%; N 13.79%; O 43.32%
Melting Point: Mp 160°

References: