>>**Entry Name: 2-Fluoro-5-nitrobenzoic acid**

CAS Registry Number: 7304-32-7
Structure by analogy with 2-Fluoro-3-nitrobenzoic acid, DTN33-G

Molecular Formula: $C_7H_4FNO_4$
Molecular Weight: 185.111
Accurate Mass: 185.012437
Percentage Composition: C 45.42%; H 2.18%; F 10.26%; N 7.57%; O 34.57%
Physical Description: Cryst. (H_2O)
Melting Point: Mp 139-140°
pKa Value: pK_a 2.73 (25°)

Aldrich: 36265-4

>>**Derivative:** Et ester

Molecular Formula: $C_9H_8FNO_4$
Molecular Weight: 213.165
Accurate Mass: 213.043737
Percentage Composition: C 50.71%; H 3.78%; F 8.91%; N 6.57%; O 30.02%
Melting Point: Mp 49.5°

>>**Derivative:** Nitrile
Synonym(s): 2-Cyano-1-fluoro-4-nitrobenzene

CAS Registry Number: 17417-09-3
Molecular Formula: $C_7H_3FN_2O_2$
Molecular Weight: 166.111
Accurate Mass: 166.017856
Percentage Composition: C 50.61%; H 1.82%; F 11.44%; N 16.86%; O 19.26%
Use/Importance: Reacts with amines, NH-heteroaromatic compds. and amino acids and used for characterisation
Physical Description: Cryst. (hexane/CH_2Cl_2)
Melting Point: Mp 73-75°
Boiling Point: $Bp_{0.5}$ 94°
Hazard & Toxicity: Irritant

References:

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Govaert, F., *CA*, 1930, **24**, 2448
Wilshire, J.F.K., *Aust. J. Chem.*, 1967, **20**, 1663, *(pmr)*
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Bridges, A.J. *et al.*, *J. Het. Chem.*, 1997, **34**, 1163-1172, *(nitrile)*