



>>Entry Name: 2-Fluoro-4-nitrobenzoic acid

CAS Registry Number: 403-24-7

Structure by analogy with 2-Fluoro-3-nitrobenzoic acid, [DTN33-G](#)

Molecular Formula: C₇H₄FNO₄

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%

Use/Importance: Inhibits growth of *Nocardia*

Physical Description: Cryst. (H₂O)

Melting Point: Mp 175° (166-167°)

>>Derivative: Me ester

Molecular Formula: C₈H₆FNO₄

Molecular Weight: 199.138

Accurate Mass: 199.028087

Percentage Composition: C 48.25%; H 3.04%; F 9.54%; N 7.03%; O 32.14%

Physical Description: Needles (MeOH)

Melting Point: Mp 75.5°

>>Derivative: Et ester

Molecular Formula: C₉H₈FNO₄

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%

Physical Description: Plates (EtOH)

Melting Point: Mp 74°

>>Derivative: *tert*-Butyl ester

Molecular Formula: C₁₁H₁₂FNO₄

Molecular Weight: 241.218

Accurate Mass: 241.075037

Percentage Composition: C 54.77%; H 5.01%; F 7.88%; N 5.81%; O 26.53%

Physical Description: Solid

Melting Point: Mp 79°

>>Derivative: Chloride

Molecular Formula: C₇H₃ClFNO₃

Molecular Weight: 203.557

Accurate Mass: 202.978549

Percentage Composition: C 41.30%; H 1.49%; Cl 17.42%; F 9.33%; N 6.88%; O 23.58%

Physical Description: Needles (C₆H₆/petrol)

Melting Point: Mp 45°

Boiling Point: Bp₁₃ 139-141°

>>Derivative: Amide

Molecular Formula: C₇H₅FN₂O₃

Molecular Weight: 184.126

Accurate Mass: 184.028421

Percentage Composition: C 45.66%; H 2.74%; F 10.32%; N 15.21%; O 26.07%

Physical Description: Plates (EtOH)

Melting Point: Mp 157°

>>Derivative: Nitrile

Synonym(s): 1-Cyano-2-fluoro-4-nitrobenzene

Molecular Formula: C₇H₃FN₂O₂

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%

Physical Description: Beige solid

References: