



>>Entry Name: Pentafluoropropanoic acid

Synonym(s): Perfluoropropionic acid

CAS Registry Number: 422-64-0

Related CAS Registry Numbers(s): 378-76-7 378-77-8 509-09-1

F3CCF2COOH

Molecular Formula: C3HF5O2

Molecular Weight: 164.032

Accurate Mass: 163.98967

Percentage Composition: C 21.97%; H 0.61%; F 57.91%; O 19.51%

Physical Description: Liq.

Boiling Point: Bp 96-97°

Solubility: Sol. H₂O, EtOH, Me₂CO, CCl₄, C₆H₆, Et₂O

Density: d₄²⁰ 1.56

Refractive Index: n_D²⁰ 1.2840

Other Data: Corrosive, hygroscopic. Fumes in air

Aldrich: 24591-7

Fluka: 77290

Rare Chemicals Library: S57995-5

Sigma: P2661

>>Derivative: Ag salt

CAS Registry Number: 509-09-1

Melting Point: Mp 242-244° (240.5-242.5°)

Other Data: Hygroscopic

Aldrich: 32621-6

>>Derivative: Me ester

CAS Registry Number: 378-75-6

Molecular Formula: C4H3F5O2

Molecular Weight: 178.058

Accurate Mass: 178.00532

Percentage Composition: C 26.98%; H 1.70%; F 53.35%; O 17.97%

Physical Description: Liq.

Boiling Point: Bp 61°

Density: d₄²⁰ 1.39

Refractive Index: n_D²⁰ 1.2884

Aldrich: 30084-5

>>Derivative: Et ester

CAS Registry Number: 426-65-3

Molecular Formula: C5H3F5O2

Molecular Weight: 192.085

Accurate Mass: 192.02097

Percentage Composition: C 31.26%; H 2.62%; F 49.45%; O 16.66%

Physical Description: Liq.

Boiling Point: Bp 76.5°

Density: d₄²⁰ 1.3

Refractive Index: n_D²⁰ 1.3002

Aldrich: 29092-0

Sigma: P5536

>>Derivative: Vinyl ester

CAS Registry Number: 357-47-1

Molecular Formula: C5H3F5O2

Molecular Weight: 190.069

Accurate Mass: 190.00532

Percentage Composition: C 31.60%; H 1.59%; F 49.98%; O 16.84%

Boiling Point: Bp 57-59.5°

Density: d₄²⁰ 1.32