



>>Entry Name: Ethylpropanedioic acid, 9CI

Synonym(s): Ethylmalonic acid, 8CI

CAS Registry Number: 601-75-2

$\text{H}_3\text{CCH}_2\text{CH}(\text{COOH})_2$

Molecular Formula: $\text{C}_5\text{H}_8\text{O}_4$

Molecular Weight: 132.116

Accurate Mass: 132.04226

Percentage Composition: C 45.46%; H 6.10%; O 48.44%

Physical Description: Prisms + $1\text{H}_2\text{O}$ (H_2O)

Melting Point: Mp 111.5° (anhyd.)

pKa Value: $\text{p}K_{\text{a}1}$ 2.99; $\text{p}K_{\text{a}2}$ 5.83 (25°)

Aldrich: 10268-7

Fluka: 4270

Sigma: E8758

>>Derivative: Di-Me ester

CAS Registry Number: 26717-67-9

Molecular Formula: $\text{C}_7\text{H}_{12}\text{O}_4$

Molecular Weight: 160.169

Accurate Mass: 160.07356

Percentage Composition: C 52.49%; H 7.55%; O 39.96%

Boiling Point: Bp $178-179^\circ$

Sigma: E3760

>>Derivative: Di-Et ester

CAS Registry Number: 133-13-1

Molecular Formula: $\text{C}_9\text{H}_{16}\text{O}_4$

Molecular Weight: 188.223

Accurate Mass: 188.10486

Percentage Composition: C 57.43%; H 8.57%; O 34.00%

Boiling Point: Bp₅ $75-77^\circ$

Aldrich: D9520-4

Fluka: 4280

Sigma: D2261

>>Derivative: Dichloride

CAS Registry Number: 55552-69-7

Molecular Formula: $\text{C}_5\text{H}_6\text{Cl}_2\text{O}_2$

Molecular Weight: 169.007

Accurate Mass: 167.974484

Percentage Composition: C 35.53%; H 3.58%; Cl 41.95%; O 18.93%

Boiling Point: Bp₃₅ $76-82^\circ$

>>Derivative: Diamide

CAS Registry Number: 6082-49-1

Molecular Formula: $\text{C}_5\text{H}_{10}\text{N}_2\text{O}_2$

Molecular Weight: 130.146

Accurate Mass: 130.074228

Percentage Composition: C 46.14%; H 7.74%; N 21.52%; O 24.59%

Physical Description: Cryst. (H_2O or EtOH)

Melting Point: Mp 216°