



>>Entry Name: 1,1,1-Ethanetriol, 9CI

Synonym(s): Orthoacetic acid

CAS Registry Number: 463-83-2

$\text{H}_3\text{CC}(\text{OH})_3$

Molecular Formula: $\text{C}_2\text{H}_6\text{O}_3$

Molecular Weight: 78.068

Accurate Mass: 78.031695

Percentage Composition: C 30.77%; H 7.75%; O 61.48%

General Statement: Not isol. in free state

>>Derivative: Tri-Me ester

Synonym(s): Trimethyl orthoacetate

CAS Registry Number: 1445-45-0

Molecular Formula: $\text{C}_5\text{H}_{12}\text{O}_3$

Molecular Weight: 120.148

Accurate Mass: 120.078645

Percentage Composition: C 49.98%; H 10.07%; O 39.95%

Boiling Point: Bp 107-109°

Aldrich: 23787-6

Fluka: 75582

Sigma: T7384

>>Derivative: Tri-Et ester

Synonym(s): 1,1,1-Triethoxyethane, 9CI. Triethyl orthoacetate

CAS Registry Number: 78-39-7

Molecular Formula: $\text{C}_8\text{H}_{18}\text{O}_3$

Molecular Weight: 162.228

Accurate Mass: 162.125595

Percentage Composition: C 59.23%; H 11.18%; O 29.59%

Use/Importance: Synthetic reagent

Boiling Point: Bp 144-146°. Bp₁₂ 45-47°

Aldrich: T6040-2

Fluka: 75580

Sigma: T7509

>>Derivative: Tri-Ph ester

Synonym(s): Triphenyl orthoacetate

Molecular Formula: $\text{C}_{20}\text{H}_{18}\text{O}_3$

Molecular Weight: 306.36

Accurate Mass: 306.125595

Percentage Composition: C 78.41%; H 5.92%; O 15.67%

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 61-62°

Boiling Point: Bp_{0.5} 148-153°

References:

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