



>>Entry Name: 3-Aminopropanal, 9CI

Synonym(s): 3-Aminopropionaldehyde, 8CI

CAS Registry Number: 352-92-1

H₂NCH₂CH₂CHO

Molecular Formula: C₃H₇NO

Molecular Weight: 73.094

Accurate Mass: 73.052764

Percentage Composition: C 49.30%; H 9.65%; N 19.16%; O 21.89%

Physical Description: Liq.

Boiling Point: Bp₁₂ 45-46°

>>Derivative: 2,4-Dinitrophenylhydrazone

Physical Description: Cryst. (EtOH)

Melting Point: Mp 178°

>>Derivative: Di-Et acetal

Synonym(s): 3,3-Diethoxy-1-propylamine. APEA

CAS Registry Number: 41365-75-7

Molecular Formula: C₇H₁₇NO₂

Molecular Weight: 147.217

Accurate Mass: 147.125929

Percentage Composition: C 57.11%; H 11.64%; N 9.51%; O 21.74%

Physical Description: Liq.

Boiling Point: Bp₂₀ 68-70°

Other: Hüls

>>Derivative: *N*-(3-Methylbutanoyl)

Synonym(s): 3-Methyl-*N*-(3-oxopropyl)butanamide, 9CI. *Diplocardia* Luciferin

CAS Registry Number: 58947-91-4

Molecular Formula: C₈H₁₅NO₂

Molecular Weight: 157.212

Accurate Mass: 157.110279

Percentage Composition: C 61.12%; H 9.62%; N 8.91%; O 20.35%

Biological Source: Bioluminescent constit. of the earthworm *Diplocardia longa*

Physical Description: Oil

>>Derivative: *N*-(3-Methylbutanoyl), 2,4-dinitrophenylhydrazone

Physical Description: Yellow cryst.

Melting Point: Mp 174°

References:

Albers, H. *et al.*, *Ber.*, 1946, **79**, 623

Birkhofer, L. *et al.*, *Chem. Ber.*, 1958, **91**, 2383

Ohtsuka, H. *et al.*, *Biochemistry*, 1976, **15**, 1001, (*Luciferin*)