



>>Entry Name: 2-Amino-2-propenoic acid, 9CI  
Synonym(s): 2-Aminoacrylic acid, 8CI. Dehydroalanine

CAS Registry Number: 1948-56-7

$\text{H}_2\text{C}=\text{C}(\text{NH}_2)\text{COOH}$

Molecular Formula:  $\text{C}_3\text{H}_5\text{NO}_2$

Molecular Weight: 87.078

Accurate Mass: 87.032029

Percentage Composition: C 41.38%; H 5.79%; N 16.09%; O 36.75%

Biological Source: Present in wool and in subtilin from *Staphylococcus aureus*

>>Derivative: N-Ac

CAS Registry Number: 5429-56-1

Molecular Formula:  $\text{C}_5\text{H}_7\text{NO}_3$

Molecular Weight: 129.115

Accurate Mass: 129.042594

Percentage Composition: C 46.51%; H 5.46%; N 10.85%; O 37.17%

Melting Point: Mp 204 (185-186°) dec.°

Other Data: Undergoes radical polym.

Aldrich: A140-1

Fluka: 190

Sigma: A3520

>>Derivative: N-Ac, Me ester

Synonym(s): Methyl 2-acetamidoacrylate

CAS Registry Number: 35356-70-8

Molecular Formula:  $\text{C}_6\text{H}_9\text{NO}_3$

Molecular Weight: 143.142

Accurate Mass: 143.058244

Percentage Composition: C 50.35%; H 6.34%; N 9.79%; O 33.53%

Physical Description: Cryst. (petrol or pentane)

Melting Point: Mp 52-54° (50-52°)

Boiling Point: Bp<sub>8</sub> 104°

>>Derivative: Nitrile

Synonym(s): 2-Amino-2-propenenitrile, 9CI. 1-Amino-1-cyanoethylene

CAS Registry Number: 69245-10-9

Molecular Formula:  $\text{C}_3\text{H}_4\text{N}_2$

Molecular Weight: 68.078

Accurate Mass: 68.037448

Percentage Composition: C 52.93%; H 5.92%; N 41.15%

Use/Importance: Probable prebiotic intermediate

Other Data: Unstable, obt. in soln.

#### References:

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