



>>Entry Name: 2-Pyrrolidineacetic acid, 9CI

Synonym(s): β -Homoproline‡



Related CAS Registry Numbers(s): 52484-80-7

Molecular Formula: C₆H₁₁NO₂

Molecular Weight: 129.158

Accurate Mass: 129.078979

Percentage Composition: C 55.80%; H 8.58%; N 10.84%; O 24.77%

Biological Source: Present in flowerheads of *Arnica montana*, *Arnica chamissonis* ssp. *foliosa*, *Arnica amplexicaulis* and *Arnica sachalinensis*. Also occurs in *Tussilago farfara*

>>Variant: (R)-form

CAS Registry Number: 61350-65-0

Molecular Formula: C₆H₁₁NO₂

Molecular Weight: 129.158

Accurate Mass: 129.078979

Percentage Composition: C 55.80%; H 8.58%; N 10.84%; O 24.77%

Melting Point: Mp 188-190°

Optical Rotation: $[\alpha]_{\text{D}}$ −44.8 (c, 1 in 3.41M HCl)

>>Variant: (S)-form

CAS Registry Number: 56633-75-1

Molecular Formula: C₆H₁₁NO₂

Molecular Weight: 129.158

Accurate Mass: 129.078979

Percentage Composition: C 55.80%; H 8.58%; N 10.84%; O 24.77%

Biological Source: Present in cured tobacco leaves

Physical Description: Needles (propanol)

Melting Point: Mp 189-191° (185°) (dec.)

Optical Rotation: $[\alpha]_{\text{D}}^{25}$ +4 (c, 1 in H₂O). $[\alpha]_{\text{D}}$ +45 (c, 1 in 3.41M HCl)

>>Derivative: Me ester

CAS Registry Number: 53912-83-7

Molecular Formula: C₇H₁₃NO₂

Molecular Weight: 143.185

Accurate Mass: 143.094629

Percentage Composition: C 58.72%; H 9.15%; N 9.78%; O 22.35%

Physical Description: Oil

>>Derivative: N-Benzyloxycarbonyl

CAS Registry Number: 56633-73-9

Physical Description: Cryst. (diisopropyl ether)

Melting Point: Mp 74.5-75.5°

Optical Rotation: $[\alpha]_{\text{D}}$ −35.3 (c, 1 in AcOH)

>>Derivative: N-Benzyloxycarbonyl, Me ester

CAS Registry Number: 56633-72-8

Physical Description: Oil

Optical Rotation: $[\alpha]_{\text{D}}$ −35.1 (c, 1 in CHCl₃)

>>Derivative: N-tert-Butoxycarbonyl

CAS Registry Number: 56502-01-3

Physical Description: Cryst. (hexane)

Melting Point: Mp 99-101°

Optical Rotation: $[\alpha]_{\text{D}}$ −39.5 (c, 1.9 in DMF) (−41.6)