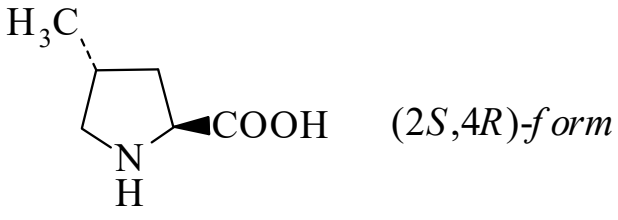
>>**Entry Name: 4-Methyl-2-pyrrolidinecarboxylic acid**
ENTRY UNDER REVIEW
Synonym(s): 4-Methylproline, 9CI



(2*S*,4*R*)-*form*

Molecular Formula: $C_6H_{11}NO_2$
Molecular Weight: 129.158
Accurate Mass: 129.078979
Percentage Composition: C 55.80%; H 8.58%; N 10.84%; O 24.77%

>>**Variant:** (2*R*,4*R*)-form
Synonym(s): D-*cis*-form

CAS Registry Number: 31137-95-8
Molecular Formula: $C_6H_{11}NO_2$
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 238-239 dec.°
Optical Rotation: $[\alpha]_D^{20}$+85.2 (c, 1.68 in H_2O). $[\alpha]_D$ +47.9 (c, 1.28 in 3*M* HCl)

>>**Variant:** (2*S*,4*R*)-form
Synonym(s): L-*trans*-form

CAS Registry Number: 23009-50-9

Molecular Formula: $C_6H_{11}NO_2$
Molecular Weight: 129.158
Accurate Mass: 129.078979
Percentage Composition: C 55.80%; H 8.58%; N 10.84%; O 24.77%
Biological Source: Constit. of young apple fruit and perry
Physical Description: Needles (EtOH/Et_2O)
Melting Point: Mp 239-240 dec.°
Optical Rotation: $[\alpha]_D^{18}$–56.6 (c, 1.03 in H_2O). $[\alpha]_D^{20}$–23.9 (c, 1.54 in 3*M* HCl)

>>**Variant:** (2*S*,4*S*)-form
Synonym(s): L-*cis*-form

CAS Registry Number: 6734-41-4

Molecular Formula: $C_6H_{11}NO_2$
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 hydrolysate of antibiotic ICI 13959
Physical Description: Cryst. (EtOH/Et_2O)
Optical Rotation: $[\alpha]_D^{18}$–83 (c, 0.53 in H_2O). $[\alpha]_D$ –43 (c, 0.51 in 3*M* HCl)

References:

Dalby, J.S. *et al.*, *J.C.S.*, 1962, 4387, *(synth)*
Wang, Q. *et al.*, *Tetrahedron*, 1998, **54**, 15759-15780, *(2S,4R-form, synth, ir, pmr, cmr)*