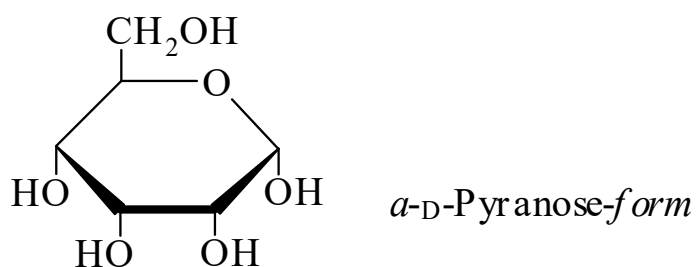




>>Entry Name: Allose, 9CI, 8CI



CAS Registry Number: 6038-51-3

Molecular Formula: C₆H₁₂O₆

Molecular Weight: 180.157

Accurate Mass: 180.06339

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

General Statement: For septanose form see [LJC74-I](#). An aq. soln. at 31° contains 14% α-pyr, 77.5% β-pyr, 3.5% α-fur, 5% β-fur and 0.01% aldehyde

>>Variant: D-form

CAS Registry Number: 2595-97-3

Molecular Formula: C₆H₁₂O₆

Molecular Weight: 180.157

Accurate Mass: 180.06339

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

Biological Source: Occurs as a 6-*O*-cinnamyl glycoside in the leaves of *Protea rubropilosa*. Extracts from the fresh-water alga *Ochromonas malhamensis* contain allose of unknown absolute configuration

Aldrich: 28500-5

Fluka: 5750

>>Derivative: Di-Et dithioacetal

CAS Registry Number: 18545-97-6

Molecular Formula: C₁₀H₂₂O₅S₂

Molecular Weight: 286.413

Accurate Mass: 286.090865

Percentage Composition: C 41.94%; H 7.74%; O 27.93%; S 22.39%

Melting Point: Mp 94-95°

Optical Rotation: $[\alpha]_D^{26} -27.4$ (c, 1.84 in MeOH)

>>Derivative: 3-Tosyl

Synonym(s): 3-*O*-Tosyl-D-allose

CAS Registry Number: 20847-04-5

Melting Point: Mp 140-143°

Optical Rotation: $[\alpha]_D +3.4$ (c, 1.0 in H₂O)

>>Derivative: Pentabenzyl

Synonym(s): 2,3,4,5,6-Penta-*O*-benzyl-D-allose

Molecular Formula: C₄₁H₄₂O₆

Molecular Weight: 630.779

Accurate Mass: 630.29814

Percentage Composition: C 78.07%; H 6.71%; O 15.22%

Optical Rotation: $[\alpha]_D^{20} +11.7$ (c, 0.53 in CHCl₃)

>>Derivative: Pentabenzyl, di-Et dithioacetal

Synonym(s): 2,3,4,5,6-Penta-*O*-benzyl-D-allose diethyl dithioacetal

Molecular Formula: C₄₅H₅₂O₅S₂

Molecular Weight: 737.035

Accurate Mass: 736.325615

Percentage Composition: C 73.33%; H 7.11%; O 10.85%; S 8.70%

Physical Description: Oil

Optical Rotation: $[\alpha]$