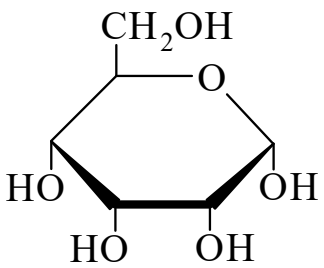
>>**Entry Name: Allose,** 9Cl, 8Cl



a-D-Pyranose-*form*

CAS Registry Number: 6038-51-3

Molecular Formula: $C_6H_{12}O_6$
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: $C_6H_{12}O_6$
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: $C_{10}H_{22}O_5S_2$
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 H_2O)

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

Molecular Formula: $C_{41}H_{42}O_6$
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 $CHCl_3$)

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

Molecular Formula: $C_{45}H_{52}O_5S_2$
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: [α]