



Percentage Composition: C 67.03%; H 6.19%; O 26.79%
Use/Importance: Chiral gelator forming gels with a wide variety of org. solvs.
Melting Point: Mp 220-221°
Optical Rotation: $[\alpha]_D +21.6$ (Py)

>>**Derivative:** 1,3:2,4:5,6-Tri-*O*-benzylidene
Synonym(s): 1,3:2,4:5,6-Tri-*O*-benzylidene-D-glucitol. 1,2:3,5:4,6-Tri-*O*-benzylidene-L-gulitol

CAS Registry Number: 4148-67-8

Molecular Formula: C₂₇H₂₆O₆
Molecular Weight: 446.499
Accurate Mass: 446.17294
Percentage Composition: C 72.63%; H 5.87%; O 21.50%
Melting Point: Mp 185° (203°)
Optical Rotation: $[\alpha]_D +30$ (CHCl₃)

>>**Derivative:** 2,4-Dibenzyl, 3,5-isopropylidene
Synonym(s): 2,4-Di-*O*-benzyl-3,5-*O*-isopropylidene-D-glucitol

Molecular Formula: C₂₃H₃₀O₆
Molecular Weight: 402.486
Accurate Mass: 402.20424
Percentage Composition: C 68.64%; H 7.51%; O 23.85%
Melting Point: Mp 65°
Optical Rotation: $[\alpha]_D^{20} +6.1$ (c, 1.0 in MeOH)

>>**Derivative:** 2,3,4,6-Tetrabenzyl
Synonym(s): 2,3,4,6-Tetra-*O*-benzyl-D-glucitol. 1,3,4,5-Tetra-*O*-benzyl-L-gulitol

CAS Registry Number: 14233-48-8

Molecular Formula: C₃₄H₃₈O₆
Molecular Weight: 542.671
Accurate Mass: 542.26684
Percentage Composition: C 75.25%; H 7.06%; O 17.69%
Physical Description: Viscous oil
Optical Rotation: $[\alpha]_D^{25} +14.7$ (c, 2.4 in CHCl₃)

>>**Derivative:** 1,3:2,4-Bis(4-methylbenzylidene)

CAS Registry Number: 81541-12-0

Molecular Formula: C₂₂H₂₆O₆
Molecular Weight: 386.444
Accurate Mass: 386.17294
Percentage Composition: C 68.38%; H 6.78%; O 24.84%
Use/Importance: Cryst. nucleation agent for polymers
Physical Description: No phys. props. accessible

>>**Variant:** L-form
Synonym(s): L-Glucitol. L-Sorbitol. D-Gulitol

CAS Registry Number: 6706-59-8

Molecular Formula: C₆H₁₄O₆
Molecular Weight: 182.173
Accurate Mass: 182.07904
Percentage Composition: C 39.56%; H 7.75%; O 52.70%
Source/Synthesis: Unknown in nature
Melting Point: Mp 89-91°
Optical Rotation: $[\alpha]_D +1.7$ (H₂O)