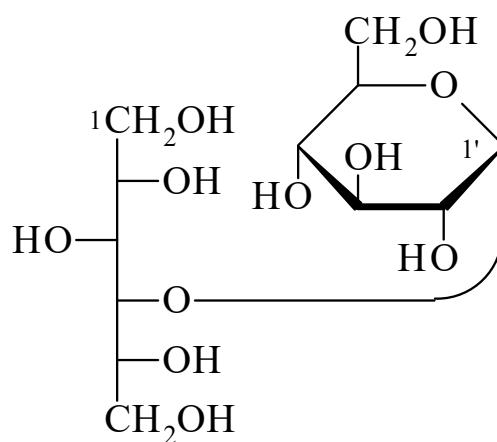




>>Entry Name: 4-*O*- α -D-Glucopyranosyl-D-glucitol, 9CI

Synonym(s): Maltitol. E 975



CAS Registry Number: 585-88-6

Molecular Formula: C₁₂H₂₄O₁₁

Molecular Weight: 344.315

Accurate Mass: 344.131865

Percentage Composition: C 41.86%; H 7.03%; O 51.11%

Use/Importance: Used in blood preservatives, cosmetics emulsions and moisturisers, pharmaceuticals and adhesives for medical uses. Permitted bulk sweetener for foods

Melting Point: Mp 149-152°

Optical Rotation: $[\alpha]_D^{21} +107$ (c, 10 in H₂O)

Other Data: Use as bulk sweetener currently (1997) not permitted in USA

Aldrich: 86206-1

Fluka: 63415

Sigma: M8892

Supelco: 4-6923

>>Derivative: Nona-Ac

CAS Registry Number: 41897-24-9

Molecular Formula: C₃₀H₄₂O₂₀

Molecular Weight: 722.65

Accurate Mass: 722.22695

Percentage Composition: C 49.86%; H 5.86%; O 44.28%

Optical Rotation: $[\alpha]_D +8.6$ (c, 1.0 in CHCl₃)

>>Derivative: 1,2:5,6-Di-*O*-isopropylidene

CAS Registry Number: 122204-87-9

Molecular Formula: C₁₈H₃₂O₁₁

Molecular Weight: 424.444

Accurate Mass: 424.194465

Percentage Composition: C 50.94%; H 7.60%; O 41.46%

Physical Description: Oil

Optical Rotation: $[\alpha]_D^{26} +62$ (c, 0.2 in CHCl₃/MeOH 1:1)

>>Derivative: 1,2:5,6-Di-*O*-isopropylidene, 2',3,3',4',6'-penta-Ac

CAS Registry Number: 122204-91-5

Molecular Formula: C₂₈H₄₂O₁₆

Molecular Weight: 634.63

Accurate Mass: 634.24729

Percentage Composition: C 52.99%; H 6.67%; O 40.34%

Physical Description: Oil

Optical Rotation: $[\alpha]_D^{25} +85.3$ (c, 1.0 in CHCl₃)