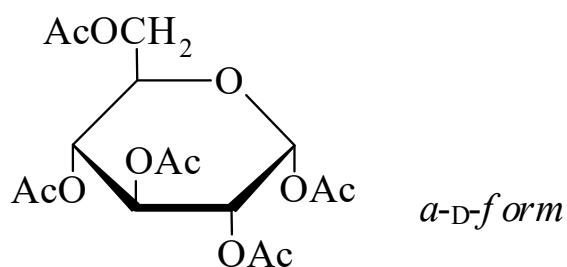




>>Entry Name: 1,2,3,4,6-Penta-*O*-acetylglucose



Extra CAS Registry Numbers(s): 83-87-4

Molecular Formula: C₁₆H₂₂O₁₁

Molecular Weight: 390.343

Accurate Mass: 390.116215

Percentage Composition: C 49.23%; H 5.68%; O 45.09%

>>Variant: α-D-Pyranose-form

CAS Registry Number: 604-68-2

Molecular Formula: C₁₆H₂₂O₁₁

Molecular Weight: 390.343

Accurate Mass: 390.116215

Percentage Composition: C 49.23%; H 5.68%; O 45.09%

Use/Importance: Reference material used in elemental microanalysis

Melting Point: Mp 112-114°

Optical Rotation: [α]_D²⁰+102 (CHCl₃)

Aldrich: G235-4

Fluka: 49200

Sigma: G5125

>>Variant: β-D-Pyranose-form

CAS Registry Number: 604-69-3

Molecular Formula: C₁₆H₂₂O₁₁

Molecular Weight: 390.343

Accurate Mass: 390.116215

Percentage Composition: C 49.23%; H 5.68%; O 45.09%

Melting Point: Mp 132-135°

Optical Rotation: [α]_D²⁰+4 (CHCl₃)

Aldrich: 28594-3

Fluka: 49210

Sigma: G5375

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 1056A; 1056B, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 625A, (*ir*)

Wolfrom, M.L. *et al.*, *Methods Carbohydr. Chem.*, 1963, **2**, 211, (*synth*)

Stanek, J. *et al.*, *The Monosaccharides*, Academic Press, N.Y. and London, 1963, 190, (*rev*)

Horton, D. *et al.*, *J.O.C.*, 1967, **32**, 1073, (*synth, pmr*)

Lichtenthaler, F.W. *et al.*, *Chem. Ber.*, 1969, **102**, 994, (*config*)

Analyst (London), 1972, **97**, 740, (*microanal*)

Vignon, M.R. *et al.*, *Tet. Lett.*, 1976, 2445, (*cmr*)