



Optical Rotation: $[\alpha]_{\text{D}}^{25} +115.1$ (c, 1.03 H₂O)

>>Derivative: Ph glycoside

Synonym(s): Phenyl α -D-lactopyranoside

Molecular Formula: C₁₈H₂₆O₁₁

Molecular Weight: 418.397

Accurate Mass: 418.147515

Percentage Composition: C 51.67%; H 6.26%; O 42.06%

Melting Point: Mp 139-141°

Optical Rotation: $[\alpha]_{\text{D}}^{19} +65$ (c, 2.45 in CHCl₃)

>>Derivative: 1-Bromo, 1-deoxy, hepta-Ac

Synonym(s): Acetobromolactose

CAS Registry Number: 4753-07-5

Molecular Formula: C₂₆H₃₅BrO₁₇

Molecular Weight: 699.456

Accurate Mass: 698.125766

Percentage Composition: C 44.65%; H 5.04%; Br 11.42%; O 38.89%

Melting Point: Mp 145 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{23} +108.7$ (CHCl₃)

>>Derivative: 1-Chloro, 1-deoxy, hepta-Ac

Synonym(s): Acetochlorolactose

Molecular Formula: C₂₆H₃₅ClO₁₇

Molecular Weight: 655.005

Accurate Mass: 654.156282

Percentage Composition: C 47.68%; H 5.39%; Cl 5.41%; O 41.52%

Melting Point: Mp 120-121°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +83.9$ (CHCl₃)

>>Variant: β -form

CAS Registry Number: 5965-66-2

Molecular Formula: C₁₂H₂₂O₁₁

Molecular Weight: 342.299

Accurate Mass: 342.116215

Percentage Composition: C 42.11%; H 6.48%; O 51.42%

Use/Importance: Anhyd.

Melting Point: Mp 252°

Optical Rotation: $[\alpha]_{\text{D}} +55.4$ (c, 4 in H₂O)

Aldrich: 25971-3

Sigma: L8773

>>Derivative: 1,2,2',3,3',4',6'-Hepta-O-Ac

>>Derivative: 2,2',3,3',4',6,6'-Hepta-O-Ac

>>Derivative: Octa-Ac

Synonym(s): Octa-O-acetyl- β -D-lactopyranose

Molecular Formula: C₂₈H₃₈O₁₉

Molecular Weight: 678.597

Accurate Mass: 678.200735

Percentage Composition: C 49.56%; H 5.64%; O 44.80%

Melting Point: Mp 90°

Optical Rotation: $[\alpha]_{\text{D}} -4.4$ (c, 10 in CHCl₃)