



Molecular Formula: C₁₆H₂₄O₉S
Molecular Weight: 392.426
Accurate Mass: 392.114105
Percentage Composition: C 48.97%; H 6.16%; O 36.69%; S 8.17%
Melting Point: Mp 83°
Optical Rotation: [α]_D −28 (CHCl₃)

>>Derivative: Et glycoside, 4,6-*O*-benzylidene
Synonym(s): Ethyl 4,6-*O*-benzylidene-1-thio- β -D-glucopyranoside

Molecular Formula: C₁₅H₂₀O₅S
Molecular Weight: 312.386
Accurate Mass: 312.103145
Percentage Composition: C 57.67%; H 6.45%; O 25.61%; S 10.26%
Melting Point: Mp 145°
Optical Rotation: [α]_D −65 (c, 1 in CHCl₃). [α]_D +47 (c, 1 in CHCl₃)
Other Data: No explanation offered for differing sign of rotation. The + ve value is presumably incorrect.

>>Derivative: *tert*-Butyl glycoside, tetra-Ac
Synonym(s): *tert*-Butyl 2,3,4,6-tetra-*O*-acetyl-1-thio- β -D-glucopyranoside

Molecular Formula: C₁₈H₂₈O₉S
Molecular Weight: 420.48
Accurate Mass: 420.145405
Percentage Composition: C 51.42%; H 6.71%; O 34.25%; S 7.63%
Physical Description: Cryst. (hexane)
Melting Point: Mp 144-146°
Optical Rotation: [α]_D¹⁸ −6 (c, 0.9 in CHCl₃)

>>Derivative: Benzyl glycoside, tetra-Ac
Synonym(s): Benzyl 2,3,4,6-tetra-*O*-acetyl-1-thio- β -D-glucopyranoside

Molecular Formula: C₂₁H₂₆O₉S
Molecular Weight: 454.497
Accurate Mass: 454.129755
Percentage Composition: C 55.50%; H 5.77%; O 31.68%; S 7.06%
Melting Point: Mp 98°
Optical Rotation: [α]_D −93.1 (CHCl₃)

>>Derivative: Ph glycoside, tetra-Ac
Synonym(s): Phenyl 2,3,4,6-tetra-*O*-acetyl-1-thio- β -D-glucopyranoside

CAS Registry Number: 23661-28-1

Molecular Formula: C₂₀H₂₄O₉S
Molecular Weight: 440.47
Accurate Mass: 440.114105
Percentage Composition: C 54.54%; H 5.49%; O 32.69%; S 7.28%
Physical Description: Needles (EtOH)
Melting Point: Mp 117-118°
Optical Rotation: [α]_D −16 (CHCl₃)

>>Derivative: Ph glycoside, tetra-Ac, *S*-oxide

Molecular Formula: C₂₀H₂₄O₁₀S
Molecular Weight: 456.47
Accurate Mass: 456.10902
Percentage Composition: C 52.63%; H 5.30%; O 35.05%; S 7.02%
Use/Importance: Glycosylating agent
Melting Point: Mp 189.5°
Optical Rotation: [α]_D²⁴ −26.9 (c, 1.0 in CHCl₃)