Optical Rotation: $[\alpha]_D$ –83.6 (MeOH)

>>**Derivative:** Me glycoside, 2,3:5,6-di-*O*-isopropylidene
Synonym(s): Methyl 2,3:5,6-di-*O*-isopropylidene-β-D-gulofuranoside

CAS Registry Number: 55520-69-9

Molecular Formula: $C_{13}H_{22}O_6$
Molecular Weight: 274.313
Accurate Mass: 274.14164
Percentage Composition: C 56.92%; H 8.08%; O 35.00%
Melting Point: Mp 78.5-79°
Optical Rotation: $[\alpha]_D$ –44.9 ($CHCl_3$)

>>**Variant:** L-form

CAS Registry Number: 6027-89-0

Molecular Formula: $C_6H_{12}O_6$
Molecular Weight: 180.157
Accurate Mass: 180.06339
Percentage Composition: C 40.00%; H 6.71%; O 53.28%
Physical Description: Syrup
Optical Rotation: $[\alpha]_D^{23}$+20 (c, 13.6 in H_2O)
Other Data: Freq. isol. as $CaCl_2$ complex
Sigma: G7128

>>**Derivative:** *N*-Benzyl-*N*-phenylhydrazone

Melting Point: Mp 130-131°
Optical Rotation: $[\alpha]_D^{20}$+29 (MeOH)

>>**Variant:** α-L-Pyranose-form

CAS Registry Number: 39281-66-8

Molecular Formula: $C_6H_{12}O_6$
Molecular Weight: 180.157
Accurate Mass: 180.06339
Percentage Composition: C 40.00%; H 6.71%; O 53.28%

>>**Derivative:** Me glycoside

>>**Variant:** α-L-Furanose-form

Molecular Formula: $C_6H_{12}O_6$
Molecular Weight: 180.157
Accurate Mass: 180.06339
Percentage Composition: C 40.00%; H 6.71%; O 53.28%

>>**Derivative:** 3,5,6-Tribenzyl, 1,2-di-Ac
Synonym(s): 1,2-Di-*O*-Acetyl-3,5,6-tri-*O*-benzyl-α-L-gulofuranose

Molecular Formula: $C_{31}H_{34}O_8$
Molecular Weight: 534.605
Accurate Mass: 534.22537
Percentage Composition: C 69.65%; H 6.41%; O 23.94%
Optical Rotation: $[\alpha]_D$ +31.4 (c, 1.3 in $CHCl_3$)