



Molecular Formula: C₈H₁₆O₅
Molecular Weight: 192.211
Accurate Mass: 192.099775
Percentage Composition: C 49.99%; H 8.39%; O 41.62%
Melting Point: Mp 131.5-132°
Optical Rotation: $[\alpha]_{\text{D}}^{25} +146 \rightarrow +100$ (c, 1 in H₂O). $[\alpha]_{\text{D}}^{25} +94 \rightarrow +186$ (H₂O)

>>Variant: α-D-Pyranose-form

CAS Registry Number: 6189-71-5

Molecular Formula: C₆H₁₂O₅
Molecular Weight: 164.158
Accurate Mass: 164.068475
Percentage Composition: C 43.90%; H 7.37%; O 48.73%
Physical Description: Plates (EtOH)
Melting Point: Mp 139-142°
Optical Rotation: $[\alpha]_{\text{D}}^{20} +76.6$ (c, 1 in H₂O)

>>Derivative: Tetra-Ac

Synonym(s): 1,2,3,4-Tetra-*O*-acetyl-α-D-fucopyranose

CAS Registry Number: 34371-40-9

Molecular Formula: C₁₄H₂₀O₉
Molecular Weight: 332.307
Accurate Mass: 332.110735
Percentage Composition: C 50.60%; H 6.07%; O 43.33%
Melting Point: Mp 94°
Optical Rotation: $[\alpha]_{\text{D}}^{25} +122$ (c, 1.04 in CHCl₃)

>>Derivative: 3,4-*O*-Isopropylidene

Synonym(s): 3,4-*O*-Isopropylidene-α-D-fucopyranose

CAS Registry Number: 56119-01-8

Molecular Formula: C₉H₁₆O₅
Molecular Weight: 204.222
Accurate Mass: 204.099775
Percentage Composition: C 52.93%; H 7.90%; O 39.17%
Melting Point: Mp 110-111°
Optical Rotation: $[\alpha]_{\text{D}}^{22} +86 \rightarrow +71$ (c, 2 in H₂O, 24h)

>>Derivative: 1,2:3,4-Di-*O*-isopropylidene

Synonym(s): 1,2:3,4-Di-*O*-isopropylidene-α-D-fucopyranose

CAS Registry Number: 4026-27-1

Molecular Formula: C₁₂H₂₀O₅
Molecular Weight: 244.287
Accurate Mass: 244.131075
Percentage Composition: C 59.00%; H 8.25%; O 32.75%
Physical Description: Syrup
Boiling Point: Bp_{0.2} 59-61°
Optical Rotation: $[\alpha]_{\text{D}}^{20} -62$ (CHCl₃)

>>Derivative: 2-Benzyl

Synonym(s): 2-*O*-Benzyl-α-D-fucopyranose

Molecular Formula: C₁₃H₁₈O₅
Molecular Weight: 254.282
Accurate Mass: 254.115425
Percentage Composition: C 61.41%; H 7.13%; O 31.46%
Melting Point: Mp 164°
Optical Rotation: $[\alpha]_{\text{D}} +66.3$ (H₂O)