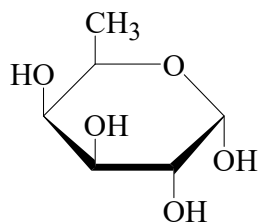




>>Entry Name: **Fucose**

Synonym(s): 6-Deoxygalactose. Rhodeose. Galactomethylose



α -D-Pyranose-*form*

Related CAS Registry Numbers(s): 3713-31-3

Molecular Formula: C₆H₁₂O₅

Molecular Weight: 164.158

Accurate Mass: 164.068475

Percentage Composition: C 43.90%; H 7.37%; O 48.73%

General Statement: An aq. soln. at 31°C contains 28% α -pyr, 67% β -pyr, =5% fur and 0.01% aldehyde

>>Variant: D-form

CAS Registry Number: 3615-37-0

Molecular Formula: C₆H₁₂O₅

Molecular Weight: 164.158

Accurate Mass: 164.068475

Percentage Composition: C 43.90%; H 7.37%; O 48.73%

Biological Source: Obtained from glycosides found in various spp. of Convolvulaceae

Melting Point: Mp 140-143°

Optical Rotation: $[\alpha]_D^{22} + 89 \rightarrow +75.7$ (H₂O)

Aldrich: 85028-4

Fluka: 47880

Sigma: F8150

>>Derivative: Osazone

Melting Point: Mp 174-175°

>>Derivative: 2-Me

Synonym(s): 2-O-Methyl-D-fucose

CAS Registry Number: 56192-98-4

Molecular Formula: C₇H₁₄O₅

Molecular Weight: 178.185

Accurate Mass: 178.084125

Percentage Composition: C 47.19%; H 7.92%; O 44.90%

Melting Point: Mp 150-153°

Optical Rotation: $[\alpha]_D^{25} + 79$ (c, 1 in H₂O)

>>Derivative: 3-Me

see 6-Deoxy-3-O-methylgalactose, [BVT70-L](#)

>>Derivative: 4-Me

Synonym(s): 4-O-Methyl-D-fucose. Curacose

CAS Registry Number: 10592-43-5

Molecular Formula: C₇H₁₄O₅

Molecular Weight: 178.185

Accurate Mass: 178.084125

Percentage Composition: C 47.19%; H 7.92%; O 44.90%

Source/Synthesis: Hydrol. prod. of Curamycin A [CKC95-B](#), Everninomicin B [CJQ21-N](#) and Flambamycin [CJQ88-M](#)

Physical Description: Prisms (EtOAc)

Melting Point: Mp 131-132°

Optical Rotation: $[\alpha]_D^{24} + 80.6$ (c, 0.92 in H₂O)