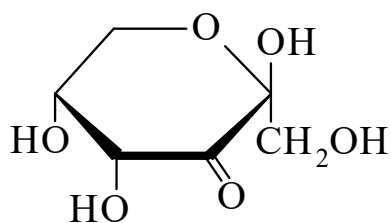




>>Entry Name: *erythro*-Hexo-2,3-diulose



Molecular Formula: C₆H₁₀O₆

Molecular Weight: 178.141

Accurate Mass: 178.04774

Percentage Composition: C 40.45%; H 5.66%; O 53.89%

>>Variant: β-D-2,6-Pyranose-form

Molecular Formula: C₆H₁₀O₆

Molecular Weight: 178.141

Accurate Mass: 178.04774

Percentage Composition: C 40.45%; H 5.66%; O 53.89%

>>Derivative: 1,2-*O*-Isopropylidene

Synonym(s): 1,2-*O*-Isopropylidene-β-D-*erythro*-hexo-2,3-diulose-2,6-pyranose

CAS Registry Number: 20789-62-2

Molecular Formula: C₉H₁₄O₆

Molecular Weight: 218.206

Accurate Mass: 218.07904

Percentage Composition: C 49.54%; H 6.47%; O 43.99%

Melting Point: Mp 96-101°

>>Derivative: 1,2:4,5-Di-*O*-isopropylidene

Synonym(s): 1,2:4,5-Di-*O*-isopropylidene-β-D-*erythro*-hexo-2,3-diulose-2,6-pyranose

CAS Registry Number: 18422-53-2

Molecular Formula: C₁₂H₁₈O₆

Molecular Weight: 258.271

Accurate Mass: 258.11034

Percentage Composition: C 55.81%; H 7.02%; O 37.17%

Physical Description: Needles (petrol)

Melting Point: Mp 102-103°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -126.4$ (c, 1.0 in CHCl₃)

Sigma: D1027

>>Derivative: 1,2:4,5-Di-*O*-cyclohexylidene

Synonym(s): 1,2:4,5-Di-*O*-cyclohexylidene-β-D-*erythro*-hexo-2,3-diulose-2,6-pyranose

Molecular Formula: C₁₈H₂₆O₆

Molecular Weight: 338.4

Accurate Mass: 338.17294

Percentage Composition: C 63.89%; H 7.74%; O 28.37%

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 152-153°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -90$ (c, 1.0 in CHCl₃)

References:

James, K. *et al.*, *J.C.S.(C)*, 1967, 2681, (β-D-dicyclohexylidene, β-D-diisopropylidene)

Cree, G.M. *et al.*, *Can. J. Biochem.*, 1968, **46**, 765, (β-D-isopropylidene)

Fayet, C. *et al.*, *Carbohydr. Res.*, 1986, **155**, 99, (β-D-diisopropylidene)