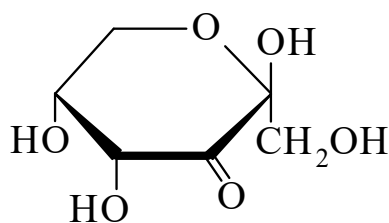




>>Entry Name: *erythro*-Hexo-2,3-diulose



**Molecular Formula:** C<sub>6</sub>H<sub>10</sub>O<sub>6</sub>

**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:** C<sub>6</sub>H<sub>10</sub>O<sub>6</sub>

**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:** C<sub>9</sub>H<sub>14</sub>O<sub>6</sub>

**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:** C<sub>12</sub>H<sub>18</sub>O<sub>6</sub>

**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 CHCl<sub>3</sub>)

**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:** C<sub>18</sub>H<sub>26</sub>O<sub>6</sub>

**Molecular Weight:** 338.4

**Accurate Mass:** 338.17294

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

**Physical Description:** Cryst. (Et<sub>2</sub>O)

**Melting Point:** Mp 152-153°

**Optical Rotation:**  $[\alpha]_{\text{D}}^{20} -90$  (c, 1.0 in CHCl<sub>3</sub>)

#### 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)