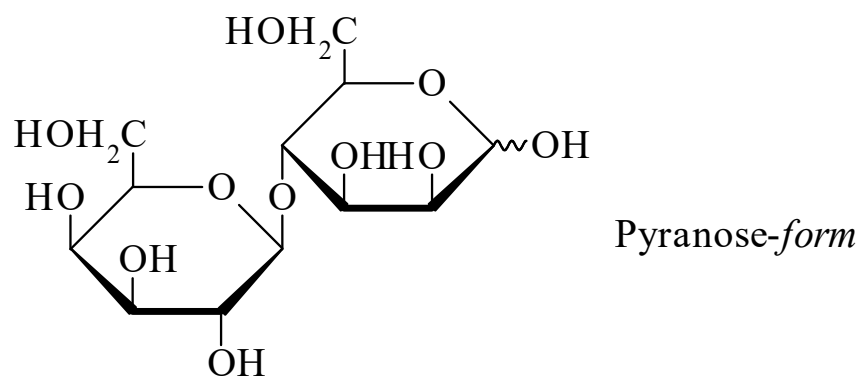




>>Entry Name: 4-*O*-β-D-Galactopyranosyl-D-mannose, 9Cl

Synonym(s): Epilactose



CAS Registry Number: 50468-56-9

Molecular Formula: C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>

Molecular Weight: 342.299

Accurate Mass: 342.116215

Percentage Composition: C 42.11%; H 6.48%; O 51.42%

Biological Source: Isolated from the acid hydrolysate of a polysaccharide from the seeds of *Caisas grandis*

Optical Rotation: [α]<sub>D</sub><sup>30</sup>+16.1 (c, 0.25 in H<sub>2</sub>O). [α]<sub>D</sub><sup>23</sup>+26.5 (c, 1.0 in H<sub>2</sub>O) (3h). [α]<sub>D</sub>+30 (H<sub>2</sub>O)

>>Variant: α-Pyranose-form

Molecular Formula: C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>

Molecular Weight: 342.299

Accurate Mass: 342.116215

Percentage Composition: C 42.11%; H 6.48%; O 51.42%

Physical Description: Monohydrate

Melting Point: Mp 150-160°

>>Derivative: Me glycoside

Synonym(s): Methyl 4-*O*-β-D-galactopyranosyl-α-D-mannopyranoside

Molecular Formula: C<sub>13</sub>H<sub>24</sub>O<sub>11</sub>

Molecular Weight: 356.326

Accurate Mass: 356.131865

Percentage Composition: C 43.82%; H 6.79%; O 49.39%

Melting Point: Mp 201°

Optical Rotation: [α]<sub>D</sub>+66 (H<sub>2</sub>O)

>>Variant: β-Pyranose-form

Molecular Formula: C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>

Molecular Weight: 342.299

Accurate Mass: 342.116215

Percentage Composition: C 42.11%; H 6.48%; O 51.42%

Melting Point: Mp 196-197°

#### References:

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Voelter, W. *et al.*, *Coll. Czech. Chem. Comm.*, 1973, **38**, 2054, (*cmr*)

Bose, S. *et al.*, *Indian J. Chem., Sect. B*, 1978, **16**, 966, (*isol, struct*)

Kovac, P., *Chem. Zvesti*, 1979, **33**, 365, (*synth*)