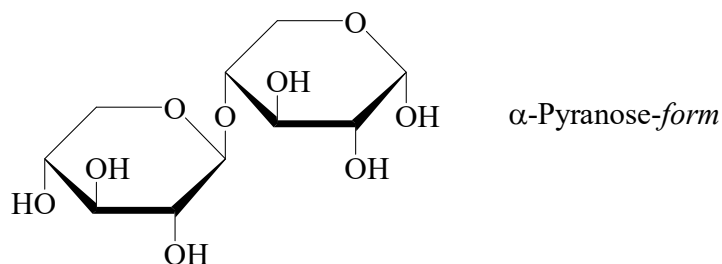




>>Entry Name: 4-*O*-β-D-Xylopyranosyl-D-xylose, 9Cl, 8Cl

Synonym(s): Xylobiose



*α*-Pyranose-form

CAS Registry Number: 6860-47-5

Molecular Formula: C<sub>10</sub>H<sub>18</sub>O<sub>9</sub>

Molecular Weight: 282.247

Accurate Mass: 282.095085

Percentage Composition: C 42.55%; H 6.43%; O 51.02%

Biological Source: Major or sole repeating unit in the main xylan chains of the plant xylans, arabinoxylans and glucuronoxylans. Isol. from the autohydrolysate of wheat-straw

spruce (*Picea nigra*) hemicelluloses and of corn-cob hemicellulose. Prepd. by the action of various endoxylanases on xylans. The rumen protozoon *Epidinium ecaudatum* contains an exoxylanase which liberates xylobiose from xylans

Melting Point: Mp 185-190°

Optical Rotation:  $[\alpha]_D^{22} -32 \rightarrow -25.5$  (H<sub>2</sub>O)

>>Derivative: Phenyllosazone

Molecular Formula: C<sub>22</sub>H<sub>28</sub>N<sub>4</sub>O<sub>7</sub>

Molecular Weight: 460.486

Percentage Composition: C 57.38%; H 6.13%; N 12.17%; O 24.32%

Melting Point: Mp 195-196 dec.°

Optical Rotation:  $[\alpha]_D^{22} -22.5 \rightarrow -77$  (c, 0.65 in 7:3 Py/EtOH)

>>Variant: *α*-Pyranose-form

Molecular Formula: C<sub>10</sub>H<sub>18</sub>O<sub>9</sub>

Molecular Weight: 282.247

Accurate Mass: 282.095085

Percentage Composition: C 42.55%; H 6.43%; O 51.02%

>>Derivative: Benzyl glycoside, tetrabenzyl

Synonym(s): Benzyl 4-*O*-(2,4-di-*O*-benzyl-β-D-xylopyranosyl)-2,3-di-*O*-benzyl-α-D-xylopyranoside

Molecular Formula: C<sub>45</sub>H<sub>48</sub>O<sub>9</sub>

Molecular Weight: 732.869

Accurate Mass: 732.329835

Percentage Composition: C 73.75%; H 6.60%; O 19.65%

Optical Rotation:  $[\alpha]_D^{20} +39$  (c, 2.2 in CHCl<sub>3</sub>)

>>Variant: β-Pyranose-form

CAS Registry Number: 552-71-6

Molecular Formula: C<sub>10</sub>H<sub>18</sub>O<sub>9</sub>

Molecular Weight: 282.247

Accurate Mass: 282.095085

Percentage Composition: C 42.55%; H 6.43%; O 51.02%

>>Derivative: 1,2,2',3,3'-Penta-Ac

Synonym(s): 4-*O*-(2,3-Di-*O*-acetyl-β-D-xylopyranosyl)-1,2,3-tri-*O*-acetyl-β-D-xylopyranose

CAS Registry Number: 78423-92-4

Molecular Formula: C<sub>20</sub>H<sub>28</sub>O<sub>14</sub>

Molecular Weight: 492.433

Accurate Mass: 492.14791

Percentage Composition: C 48.78%; H 5.73%; O 45.49%

Melting Point: Mp 180-181°

Optical Rotation:  $[\alpha]_D^{22} -76$  (CHCl<sub>3</sub>)