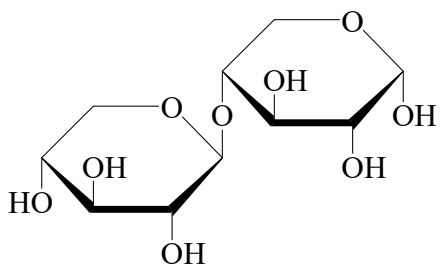
>>**Entry Name: 4-*O*-β-D-Xylopyranosyl-D-xylose,** 9CI, 8CI
Synonym(s): Xylobiose



α-Pyranose-*form*

CAS Registry Number: 6860-47-5

Molecular Formula: $C_{10}H_{18}O_9$
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 → –25.5 (H_2O)

>>**Derivative:** Phenylosazone

Molecular Formula: $C_{22}H_{28}N_4O_7$
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 → –77 (c, 0.65 in 7:3 Py/EtOH)

>>**Variant:** α-Pyranose-form

Molecular Formula: $C_{10}H_{18}O_9$
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: $C_{45}H_{48}O_9$
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 $CHCl_3$)

>>**Variant:** β-Pyranose-form

CAS Registry Number: 552-71-6
Molecular Formula: $C_{10}H_{18}O_9$
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: $C_{20}H_{28}O_{14}$
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 ($CHCl_3$)