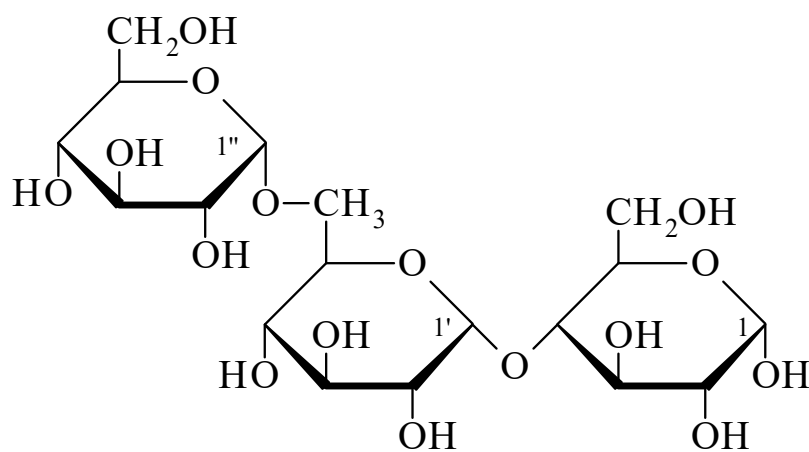




>>Entry Name: Panose, 9CI

ENTRY UNDER REVIEW

Synonym(s): *O*- α -D-Glucopyranosyl-(1 $\rightarrow$ 6)-*O*- α -D-glucopyranosyl-(1 $\rightarrow$ 4)-D-glucose, 9CI. 4- α -Isomaltosylglucose



α -Pyranose-form

CAS Registry Number: 33401-87-5

Extra CAS Registry Numbers(s): 25193-53-7

Molecular Formula: C₁₈H₃₂O₁₆

Molecular Weight: 504.441

Accurate Mass: 504.16904

Percentage Composition: C 42.86%; H 6.39%; O 50.75%

Biological Source: Metab. of *Aspergillus niger*. Isol. from wort and beer

Melting Point: Mp 223 dec. $^{\circ}$ (195-198 $^{\circ}$)

Optical Rotation: $[\alpha]_{\text{D}}^{25} +163 \rightarrow +155.5$ (c, 4.0 in H₂O). $[\alpha]_{\text{D}} +147$ (H₂O)

Fluka: 76198

Sigma: P2407

>>Variant: α -Pyranose-form

Molecular Formula: C₁₈H₃₂O₁₆

Molecular Weight: 504.441

Accurate Mass: 504.16904

Percentage Composition: C 42.86%; H 6.39%; O 50.75%

>>Derivative: Benzyl glycoside, decabenzyl

CAS Registry Number: 85011-47-8

Molecular Formula: C₉₅H₉₈O₁₆

Molecular Weight: 1495.81

Accurate Mass: 1494.68549

Percentage Composition: C 76.28%; H 6.60%; O 17.11%

Physical Description: Syrup

Optical Rotation: $[\alpha]_{\text{D}}^{20} +75$ (c, 1.0 in CHCl₃)

>>Variant: β -Pyranose-form

Molecular Formula: C₁₈H₃₂O₁₆

Molecular Weight: 504.441

Accurate Mass: 504.16904

Percentage Composition: C 42.86%; H 6.39%; O 50.75%

>>Derivative: 2'',3'',4'',6''-Tetrabenzyl, 1,2,2',3,3',6-hexa-Ac

CAS Registry Number: 93417-47-1

Molecular Formula: C₅₈H₆₈O₂₂

Molecular Weight: 1117.162

Accurate Mass: 1116.42023

Percentage Composition: C 62.36%; H 6.13%; O 31.51%

Physical Description: Cryst. (EtOH/2-propanol)

Melting Point: Mp 152-153 $^{\circ}$

Optical Rotation: $[\alpha]$