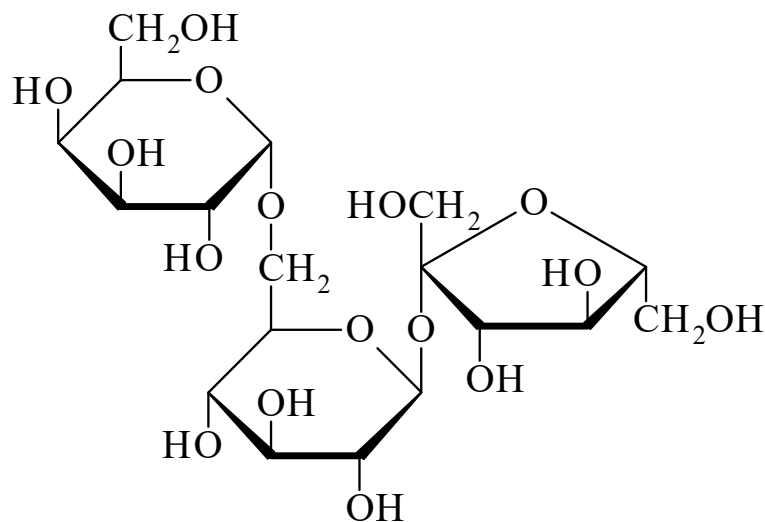




>>Entry Name: Raffinose, 8CI

ENTRY UNDER REVIEW

Synonym(s): β -D-Fructofuranosyl α -D-galactopyranosyl-(1 $\rightarrow$ 6)- α -D-glucopyranoside, 9CI. Melitriose. Gossypose. Melitose



CAS Registry Number: 512-69-6

Molecular Formula: $C_{18}H_{32}O_{16}$

Molecular Weight: 504.441

Accurate Mass: 504.16904

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

Melting Point: Mp 118° (anhyd.)

Optical Rotation: $[\alpha]_D +123$ (c, 2 in H_2O) (anhyd.)

Other Data: Sweet taste. Sweetness 0.48 x sucrose. Does not reduce Fehling's soln. Invertase or raffinase gives Melibiose and Fructose

>>Derivative: Pentahydrate

CAS Registry Number: 17629-30-0

Physical Description: Prisms

Melting Point: Mp 78°

Aldrich: 20667-9

Fluka: 83400

Sigma: R7630

Supelco: R42-2250

>>Derivative: Undeca-Ac

Molecular Formula: $C_{40}H_{54}O_{27}$

Molecular Weight: 966.85

Accurate Mass: 966.285255

Percentage Composition: C 49.69%; H 5.63%; O 44.68%

Melting Point: Mp 101°

Optical Rotation: $[\alpha]_D +100$ (c, 8 in EtOH)

>>Derivative: Undeca-Me

Molecular Formula: $C_{29}H_{54}O_{16}$

Molecular Weight: 658.736

Accurate Mass: 658.34119

Percentage Composition: C 52.88%; H 8.26%; O 38.86%

Boiling Point: Bp₂ 238-240°

Optical Rotation: $[\alpha]_D^{17} +128.4$ (c, 1 in H_2O)

References: