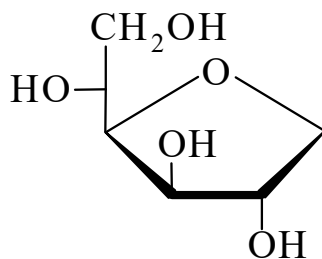




>> Name: 1,4-Anhydroglucitol, 9CI, 8CI

ENTRY UNDER REVIEW

Synonym(s): 1,4-Anhydrosorbitol. Arlitan. Sorbitan



CAS Registry Number: 27299-12-3

Related CAS Registry Numbers(s): 36521-89-8 51938-44-4 54392-26-6

Extra CAS Registry Numbers(s): 12441-09-7

Molecular Formula: C₆H₁₂O₅

Molecular Weight: 164.158

Accurate Mass: 164.068475

Percentage Composition: C 43.90%; H 7.37%; O 48.73%

>>Variant: D-form

Molecular Formula: C₆H₁₂O₅

Molecular Weight: 164.158

Accurate Mass: 164.068475

Percentage Composition: C 43.90%; H 7.37%; O 48.73%

Physical Description: Cryst. (2-propanol)

Melting Point: Mp 115-116°

Optical Rotation: $[\alpha]_D^{27} -21.9$ (c, 2.5 in H₂O)

>>Derivative: 6-*O*-Dodecanoyl

Synonym(s): Sorbitan monolaurate, BAN, USAN. **Sorbitan laurate**, INN. Sorbester P12. Span 20. E493

CAS Registry Number: 1338-39-2

Molecular Formula: C₁₈H₃₄O₆

Molecular Weight: 346.463

Accurate Mass: 346.23554

Percentage Composition: C 62.40%; H 9.89%; O 27.71%

Use/Importance: Nonionic surface active agent. Used as a 0.1% soln. in toluene for extraction-photometric detn. of SO₄²⁽⁻⁾ ($\lambda_{\max}$ 600 nm, ϵ 15000, toluene). Sorbitan esters used as emulsifying agents in pharmaceutical and cosmetic preparations

Hazard & Toxicity: Eye irritant. LD₅₀ (rat, orl) 33600 mg/kg

Aldrich: 31821-3

Fluka: 85544

Sigma: S6635

>>Derivative: 6-*O*-Hexadecanoyl

Synonym(s): Sorbitan monopalmitate, BAN, USAN. **Sorbitan palmitate**, INN. Sorbester P16. Span 40. E495

CAS Registry Number: 26266-57-9

Molecular Formula: C₂₂H₄₂O₆

Molecular Weight: 402.57

Accurate Mass: 402.29814

Percentage Composition: C 65.64%; H 10.52%; O 23.85%

Use/Importance: Nonionic surface active agent

Aldrich: 38892-0

Fluka: 85545

Sigma: S6885