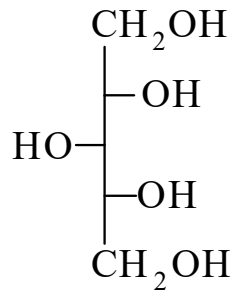
>>**Entry Name: Xylitol,** 9CI
ENTRY UNDER REVIEW
Synonym(s): Xylite. Xyliton. E967. Klinit. Kylit



CAS Registry Number: 87-99-0
Extra CAS Registry Numbers(s): 16277-71-7

Molecular Formula: $C_5H_{12}O_5$
Molecular Weight: 152.147
Accurate Mass: 152.068475
Percentage Composition: C 39.47%; H 7.95%; O 52.58%
Biological Source: Occurs in mushroom *Psalliota campestris* and roots of *Primula officinalis*. Prod. industrially by redn. of Xylose BTQ50-C obt. from wood cellulose
Use/Importance: Nutritive sweetener. Sweetening agent used in sugar free sweets and chewing gums and pharmaceuticals
Physical Description: Two forms: metastable, rhombic cryst. and stable, monoclinic cryst.
Melting Point: Mp 61-61.5° (metastable). Mp 93-94.5° (stable)
Solubility: BERDY SOL: Poorly sol. hexane
Other Data: Opt. inactive (*meso*-)
Hazard & Toxicity: LD_{50} (mus, orl) 22000 mg/kg; adverse gastrointestinal effects (large dose) ; BERDY HAZD : LD_{50} (mus, orl) 22000 mg/kg

Aldrich: 85158-2
Fluka: 95649
Supelco: 4-6927

>>**Derivative:** Penta-Ac

CAS Registry Number: 13437-68-8

Molecular Formula: $C_{15}H_{22}O_{10}$
Molecular Weight: 362.333
Accurate Mass: 362.1213
Percentage Composition: C 49.72%; H 6.12%; O 44.16%
Melting Point: Mp 62.5-63°

>>**Derivative:** Pentabenzoyl

CAS Registry Number: 36030-82-7

Molecular Formula: $C_{40}H_{32}O_{10}$
Molecular Weight: 672.687
Accurate Mass: 672.19955
Percentage Composition: C 71.42%; H 4.79%; O 23.78%
Melting Point: Mp 106-107°

>>**Derivative:** 1,2:3,4-Di-*O*-isopropylidene

Molecular Formula: $C_{11}H_{20}O_5$
Molecular Weight: 232.276
Accurate Mass: 232.131075
Percentage Composition: C 56.88%; H 8.68%; O 34.44%
Melting Point: Mp 36°