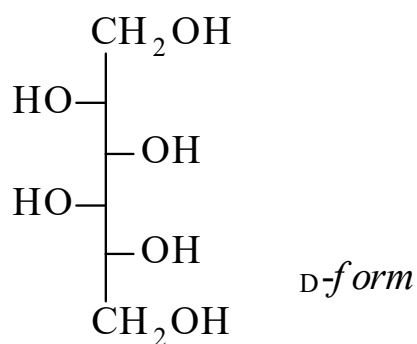




>>Entry Name: **Iditol**, 9CI, 8CI
Synonym(s): Sorbieritol. *ido*-Hexitol



CAS Registry Number: 24557-79-7
Related CAS Registry Numbers(s): 45007-61-2

Molecular Formula: $C_6H_{14}O_6$
Molecular Weight: 182.173
Accurate Mass: 182.07904
Percentage Composition: C 39.56%; H 7.75%; O 52.70%

>>Variant: D-form

CAS Registry Number: 25878-23-3

Molecular Formula: $C_6H_{14}O_6$
Molecular Weight: 182.173
Accurate Mass: 182.07904
Percentage Composition: C 39.56%; H 7.75%; O 52.70%
Melting Point: Mp 73-74°
Optical Rotation: $[\alpha]_D^{20} +3.5$ (H₂O)

>>Derivative: Hexa-Ac
Synonym(s): 1,2,3,4,5,6-Hexa-*O*-acetyl-D-iditol

Molecular Formula: $C_{18}H_{26}O_{12}$
Molecular Weight: 434.396
Accurate Mass: 434.14243
Percentage Composition: C 49.77%; H 6.03%; O 44.20%
Melting Point: Mp 120°
Optical Rotation: $[\alpha]_D^{20} +25.3$ (CHCl₃)

>>Variant: L-form

CAS Registry Number: 488-45-9

Molecular Formula: $C_6H_{14}O_6$
Molecular Weight: 182.173
Accurate Mass: 182.07904
Percentage Composition: C 39.56%; H 7.75%; O 52.70%
Biological Source: Occurs with D-glucitol in the berry of mountain ash (*Sorbus aucuparia*) and in other plants
Melting Point: Mp 73.5°
Optical Rotation: $[\alpha]_D^{20} -3.5$ (c, 1.0 in H₂O)
Aldrich: 30227-9
Sigma: I4635

>>Derivative: Hexa-Ac
Synonym(s): 1,2,3,4,5,6-Hexa-*O*-acetyl-L-iditol

CAS Registry Number: 13443-46-4

Molecular Formula: $C_{18}H_{26}O_{12}$
Molecular Weight: 434.396
Accurate Mass: 434.14243
Percentage Composition: C 49.77%; H 6.03%; O 44.20%
Melting Point: Mp 122°
Optical Rotation: $[\alpha]_D^{23} -25.9$ (c, 1.4 in CHCl₃)
Sigma: I4260