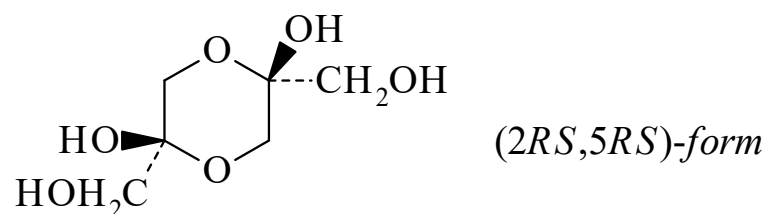




>>Entry Name: 2,5-Dihydroxy-1,4-dioxane-2,5-dimethanol, 9CI

Synonym(s): Dihydroxyacetone dimer



CAS Registry Number: 89727-88-8

Related CAS Registry Numbers(s): 18294-29-6 18294-30-9 159557-76-3

Molecular Formula: C₆H₁₂O₆

Molecular Weight: 180.157

Accurate Mass: 180.06339

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

General Statement: The cyclic hemiketal dimer of 1,3-Dihydroxy-2-propanone [HDN58-B](#)

>>Variant: (2*RS*,5*RS*)-form

Synonym(s): (±)-*cis*-form

Molecular Formula: C₆H₁₂O₆

Molecular Weight: 180.157

Accurate Mass: 180.06339

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

>>Derivative: 2,5-Di-*O*-Et

Synonym(s): 2,5-Diethoxy-1,4-dioxane-2,5-dimethanol, 9CI

CAS Registry Number: 158918-59-3

Molecular Formula: C₁₀H₂₀O₆

Molecular Weight: 236.264

Accurate Mass: 236.12599

Percentage Composition: C 50.84%; H 8.53%; O 40.63%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 141-146°

>>Variant: (2*RS*,5*SR*)-form

Synonym(s): *trans*-form

CAS Registry Number: 62147-49-3

Molecular Formula: C₆H₁₂O₆

Molecular Weight: 180.157

Accurate Mass: 180.06339

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

Physical Description: Cryst.

Melting Point: Mp 78-79°

Other Data: A cryst. form of 1,3-Dihydroxy-2-propanone [HDN58-B](#). Cryst. in 4 different cryst. forms. *Meso*-

Aldrich: D10720-4

Fluka: 37430

>>Derivative: 2,5-Di-*O*-Et

CAS Registry Number: 158918-58-2

Physical Description: Cryst. (MeOH)

Melting Point: Mp 126-131°

References:

Davis, L. *et al.*, *Bioorg. Chem.*, 1973, **2**, 197, (*tautom*)

Kobayashi, Y. *et al.*, *J. Mol. Struct.*, 1976, **35**, 85, (*cryst struct, ir, Raman*)

Jung, S.-H. *et al.*, *J.O.C.*, 1994, **59**, 7182, (*Di-Et ether*)

Vaogen, V. *et al.*, *Tetrahedron*, 1994, **50**, 10055, (*di-Et ether, synth, pmr, cmr, cryst struct*)