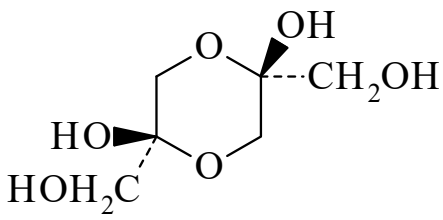
>>**Entry Name: 2,5-Dihydroxy-1,4-dioxane-2,5-dimethanol,** 9CI
Synonym(s): Dihydroxyacetone dimer



(2*RS*,5*RS*)-*form*

CAS Registry Number: 89727-88-8
Related CAS Registry Numbers(s): 18294-29-6 18294-30-9 159557-76-3

Molecular Formula: $C_6H_{12}O_6$
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: $C_6H_{12}O_6$
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: $C_{10}H_{20}O_6$
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: $C_6H_{12}O_6$
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)*