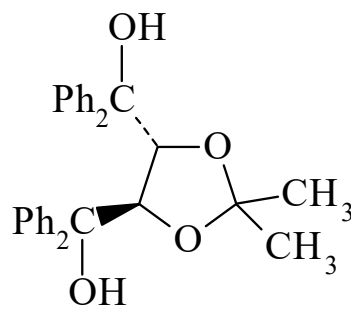




>>Entry Name: 2,2-Dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -tetraphenyl-1,3-dioxolane-4,5-dimethanol, 9Cl

Synonym(s): 4,5-Bis(hydroxydiphenylmethyl)-2,2-dimethyl-1,3-dioxacyclopentane. TADDOL



Related CAS Registry Numbers(s): 93379-49-8 118139-82-5

Molecular Formula: C₃₁H₃₀O₄

Molecular Weight: 466.576

Accurate Mass: 466.21441

Percentage Composition: C 79.80%; H 6.48%; O 13.72%

>>Variant: (4*R*,5*R*)-form

Synonym(s): (–)-*trans*-form

CAS Registry Number: 93379-48-7

Molecular Formula: C₃₁H₃₀O₄

Molecular Weight: 466.576

Accurate Mass: 466.21441

Percentage Composition: C 79.80%; H 6.48%; O 13.72%

Use/Importance: Chiral host molecule for resoln. of bicyclic enones by formn. of host-guest complexes. Compds. of this class are generally useful chiral auxiliaries for prepn. of enantiomerically pure compds.

Physical Description: Powder

Melting Point: Mp 195-196.5°

Optical Rotation: [α]_D –60.6 (c, 1.0 in CHCl₃)

Aldrich: 26500-4

Fluka: 59532

Sigma: D1431

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 377B, (*nmr*)

Toda, F. *et al.*, *Tet. Lett.*, 1988, **29**, 551, (*synth, use*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1989, **14**, 49, (*use*)

Von dem Bussche-Hünnefeld, C. *et al.*, *Helv. Chim. Acta*, 1992, **75**, 438, (*bibl*)

Kaupp, G., *Angew. Chem., Int. Ed.*, 1994, **33**, 728, (*rev*)

Alexakis, A. *et al.*, *Eur. J. Org. Chem.*, 2000, 4011-4027, (*use*)