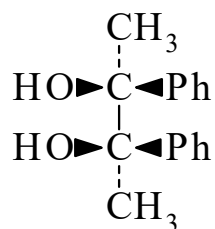




>>Entry Name: 2,3-Diphenyl-2,3-butanediol, 9CI

Synonym(s): Acetophenonepinacol



(2*R*,3*R*)-form

CAS Registry Number: 1636-34-6

Related CAS Registry Numbers(s): 5132-85-4

Molecular Formula: C₁₆H₁₈O₂

Molecular Weight: 242.317

Accurate Mass: 242.13068

Percentage Composition: C 79.31%; H 7.49%; O 13.21%

Fluka: 42830

Rare Chemicals Library: S62706-2

>>Variant: (2*R*,3*R*)-form

CAS Registry Number: 33603-65-5

Molecular Formula: C₁₆H₁₈O₂

Molecular Weight: 242.317

Accurate Mass: 242.13068

Percentage Composition: C 79.31%; H 7.49%; O 13.21%

Optical Rotation: $[\alpha]_D^{22} +31.4$ (c, 0.5 in Et₂O)

>>Variant: (2*S*,3*S*)-form

CAS Registry Number: 63902-56-7

Molecular Formula: C₁₆H₁₈O₂

Molecular Weight: 242.317

Accurate Mass: 242.13068

Percentage Composition: C 79.31%; H 7.49%; O 13.21%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 104.5-105°

Optical Rotation: $[\alpha]_D^{25} -34.4$ (c, 2.7 in EtOH)

>>Derivative: Di-Me ether

Synonym(s): 2,3-Dimethoxy-2,3-diphenylbutane

Molecular Formula: C₁₈H₂₂O₂

Molecular Weight: 270.371

Accurate Mass: 270.16198

Percentage Composition: C 79.96%; H 8.20%; O 11.84%

Physical Description: Fine needles

Melting Point: Mp 93-94°

Optical Rotation: $[\alpha]_D^{24} +71.6$ (c, 3.1 in CHCl₃)

>>Variant: (2*RS*,3*RS*)-form

Synonym(s): (±)-form

CAS Registry Number: 22985-90-6

Molecular Formula: C₁₆H₁₈O₂

Molecular Weight: 242.317

Accurate Mass: 242.13068

Percentage Composition: C 79.31%; H 7.49%; O 13.21%

Melting Point: Mp 125-126° (122-124°)

>>Derivative: Di-Me ether

Melting Point: Mp 111-111.5°

Other Data: Dogan *et al* quote Mp 171-173° but this appears to be incorrect (*meso*-form below)