



Melting Point: Mp 105.5-106.5°

Optical Rotation: $[\alpha]_D^{20} +246$ (CHCl₃)

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

Synonym(s): (±)-*threo*-form. α-form

CAS Registry Number: 41915-64-4

Molecular Formula: C₁₆H₁₄O₄

Molecular Weight: 270.284

Accurate Mass: 270.08921

Percentage Composition: C 71.10%; H 5.22%; O 23.68%

Physical Description: Cryst. + 1H₂O

Melting Point: Mp 183° (solidifies and remelts at 220-221°)

Solubility: Sol. Et₂O, CHCl₃, hot C₆H₆

pKa Value: p*K*_a 3.59 (25°)

>>**Derivative:** Mono-Me ester

Molecular Formula: C₁₇H₁₆O₄

Molecular Weight: 284.311

Accurate Mass: 284.10486

Percentage Composition: C 71.82%; H 5.67%; O 22.51%

Physical Description: Needles (MeOH)

Melting Point: Mp 196-198°

>>**Derivative:** Di-Me ester

Melting Point: Mp 173.5-174°

>>**Derivative:** Anhydride

Melting Point: Mp 115-116°

Other Data: Subl.

>>**Derivative:** Dinitrile

Synonym(s): 1,2-Dicyano-1,2-diphenylethane. α,β-Dicyanobibenzyl

CAS Registry Number: 67705-36-6

Molecular Formula: C₁₆H₁₂N₂

Molecular Weight: 232.284

Accurate Mass: 232.100048

Percentage Composition: C 82.73%; H 5.21%; N 12.06%

Melting Point: Mp 160°

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

Synonym(s): *meso*-form. β-form

CAS Registry Number: 1225-13-4

Molecular Formula: C₁₆H₁₄O₄

Molecular Weight: 270.284

Accurate Mass: 270.08921

Percentage Composition: C 71.10%; H 5.22%; O 23.68%

Melting Point: Mp 252°

Solubility: Spar. sol. AcOH, insol. H₂O, C₆H₆

pKa Value: p*K*_a 3.7 (25°)

Other Data: Heating above Mp gives anhydride of (±)-form

>>**Derivative:** Di-Me ester

CAS Registry Number: 25169-81-7

Melting Point: Mp 219-220°