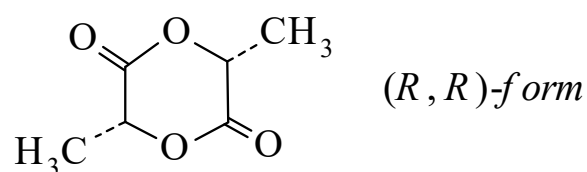




>>Entry Name: 3,6-Dimethyl-1,4-dioxane-2,5-dione, 9CI

Synonym(s): 2,5-Dimethyl-3,6-*p*-dioxandione. 2,5-Dimethyl-3,6-dioxo-1,4-dioxan. Lactide



CAS Registry Number: 95-96-5

Related CAS Registry Numbers(s): 13076-19-2

Molecular Formula: C₆H₈O₄

Molecular Weight: 144.127

Accurate Mass: 144.04226

Percentage Composition: C 50.00%; H 5.59%; O 44.40%

Use/Importance: Intermed. in poly(lactide) synth.

Aldrich: 30314-3

Rare Chemicals Library: S57131-8

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

Synonym(s): D-*cis*-form

CAS Registry Number: 13076-17-0

Extra CAS Registry Numbers(s): 17699-82-0

Molecular Formula: C₆H₈O₄

Molecular Weight: 144.127

Accurate Mass: 144.04226

Percentage Composition: C 50.00%; H 5.59%; O 44.40%

Physical Description: Rhomboids (Et₂O)

Melting Point: Mp 95°

Boiling Point: Bp₂₅ 150°

Optical Rotation: $[\alpha]_D^{16} +281.6$ (C₆H₆)

Solubility: Spar. sol. EtOH, C₆H₆, CHCl₃, Et₂O

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

Synonym(s): L-*cis*-form

CAS Registry Number: 4511-42-6

Extra CAS Registry Numbers(s): 17699-81-9

Molecular Formula: C₆H₈O₄

Molecular Weight: 144.127

Accurate Mass: 144.04226

Percentage Composition: C 50.00%; H 5.59%; O 44.40%

Physical Description: Rhomboids (Et₂O)

Melting Point: Mp 95°

Boiling Point: Bp₂₅ 150°

Optical Rotation: $[\alpha]_D^{18} -298$ (C₆H₆)

Solubility: Spar. sol. Et₂O

Aldrich: 36704-4

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

Synonym(s): (±)-*cis*-form

CAS Registry Number: 615-95-2

Molecular Formula: C₆H₈O₄

Molecular Weight: 144.127

Accurate Mass: 144.04226

Percentage Composition: C 50.00%; H 5.59%; O 44.40%

Physical Description: Pale yellow cryst. or needles (EtOH)

Melting Point: Mp 124.5°

Boiling Point: Bp₈ 142°

Solubility: Spar. sol. EtOH, Et₂O, insol. petrol, CCl₄

Other Data: Hydrolysed by cold H₂O

References: