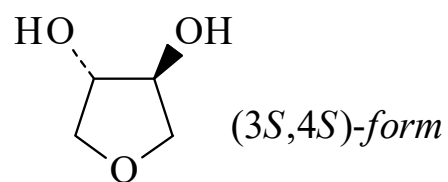




>>Entry Name: Tetrahydro-3,4-furandiol, 9CI

Synonym(s): 3,4-Dihydroxytetrahydrofuran



CAS Registry Number: 27725-58-2

Related CAS Registry Numbers(s): 473-85-8 84709-85-3

Molecular Formula: C₄H₈O₃

Molecular Weight: 104.105

Accurate Mass: 104.047345

Percentage Composition: C 46.15%; H 7.75%; O 46.11%

>>Variant: (3*S*,4*S*)-form

Synonym(s): (–)-*trans*-form. 1,4-Anhydro-L-threitol. L-Threitan

CAS Registry Number: 22554-74-1

Molecular Formula: C₄H₈O₃

Molecular Weight: 104.105

Accurate Mass: 104.047345

Percentage Composition: C 46.15%; H 7.75%; O 46.11%

Physical Description: Hygroscopic liq. cryst. on standing

Melting Point: Mp 63-64°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -4$ (c, 7.2 in H₂O)

>>Variant: (3*RS*,4*RS*)-form

Synonym(s): (±)-*trans*-form. DL-Threitan

CAS Registry Number: 59727-71-8

Molecular Formula: C₄H₈O₃

Molecular Weight: 104.105

Accurate Mass: 104.047345

Percentage Composition: C 46.15%; H 7.75%; O 46.11%

Use/Importance: Co-monomer in poly(alkylene phosphates)

Melting Point: Mp 40°

Boiling Point: Bp₃₀ 59-60°

>>Variant: (3*RS*,4*SR*)-form

Synonym(s): *cis*-form. 1,4-Anhydroerythritol. Erythritan

CAS Registry Number: 4358-64-9

Molecular Formula: C₄H₈O₃

Molecular Weight: 104.105

Accurate Mass: 104.047345

Percentage Composition: C 46.15%; H 7.75%; O 46.11%

Use/Importance: Synthetic intermed. Monomer used in epoxy resins

Physical Description: Hygroscopic liq. or cryst. which quickly liquefy on standing

Boiling Point: Bp_{0.1} 86-88°

Refractive Index: n_D²² 1.4812

Aldrich: 34092-8

>>Derivative: Bis-4-nitrobenzoyl

Melting Point: Mp 176-177° (173-174°)

>>Derivative: Bis(4-methylbenzenesulfonyl)

Physical Description: Cryst. (MeOH)

Melting Point: Mp 91.5-92.5°

References: