



CAS Registry Number: 113350-84-8

Molecular Formula: C₁₈H₂₂O₄

Molecular Weight: 302.369

Accurate Mass: 302.15181

Percentage Composition: C 71.50%; H 7.33%; O 21.17%

Physical Description: Cryst. (hexane/EtOAc)

Melting Point: Mp 45-46°

Optical Rotation: [α]_D²¹ -22.5 (c, 0.50 in EtOH)

>>**Derivative:** 1,4-Bis(4-chlorobenzyl)

CAS Registry Number: 85362-86-3

Molecular Formula: C₁₈H₂₀Cl₂O₄

Molecular Weight: 371.259

Accurate Mass: 370.073864

Percentage Composition: C 58.23%; H 5.43%; Cl 19.10%; O 17.24%

Melting Point: Mp 76-78°

Optical Rotation: [α]_D²⁰ +6 (c, 3 in CHCl₃)

Aldrich: 30964-8

Fluka: 14635

Sigma: C4161

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

Synonym(s): L-form

CAS Registry Number: 2319-57-5

Molecular Formula: C₄H₁₀O₄

Molecular Weight: 122.121

Accurate Mass: 122.05791

Percentage Composition: C 39.34%; H 8.25%; O 52.41%

Physical Description: Needles (EtOH)

Melting Point: Mp 88°

Optical Rotation: [α]_D²⁰ -4 (c, 7 in H₂O). [α]_D²⁷ +13 (c, 2 in EtOH)

Solubility: V. sol. H₂O, hot EtOH

Aldrich: 29887-5

Fluka: 89175

Sigma: T1658

>>**Derivative:** Tetra-Ac

Synonym(s): 1,2,3,4-Tetra-*O*-acetyl-L-threitol

CAS Registry Number: 49560-29-4

Molecular Formula: C₁₂H₁₈O₈

Molecular Weight: 290.269

Accurate Mass: 290.10017

Percentage Composition: C 49.65%; H 6.25%; O 44.10%

Boiling Point: Bp_{0.05} 145°

Optical Rotation: [α]_D²⁵ -32 (c, 2 in EtOH)

>>**Derivative:** 1,4-Dimesyl

Synonym(s): Treosulfan, BAN, INN. Amebisan. Dihydroxybusulfan. Ovastat. Threosulphan. Treoforon. Leo 40067. NSC 39069

CAS Registry Number: 299-75-2

Molecular Formula: C₆H₁₄O₈S₂

Molecular Weight: 278.304

Accurate Mass: 278.01301

Percentage Composition: C 25.89%; H 5.07%; O 45.99%; S 23.04%

Use/Importance: Antineoplastic agent

Calculated Log P Data: Log P -2.2 (calc)

Hazard & Toxicity: Human carcinogen, mutagen