



Molecular Weight: 210.16
Accurate Mass: 209.954264
Percentage Composition: C 22.86%; H 1.92%; K 18.60%; Na 10.94%; O 45.68%
Physical Description: Cryst. + 4H₂O
Other Data: Loses 3H₂O at 100° and becomes anhyd. at 130-140°; dec. >220°

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

Synonym(s): D-form. D-Threonic acid

CAS Registry Number: 147-71-7

Molecular Formula: C₄H₆O₆
Molecular Weight: 150.088
Accurate Mass: 150.01644
Percentage Composition: C 32.01%; H 4.03%; O 63.96%

Melting Point: Mp 169-170°
Optical Rotation: $[\alpha]_{\text{D}}^{20} -20$ (c, 20.0 in H₂O)
Other Data: Not used commercially
Aldrich: T20-6
Fluka: 95320
Sigma: T0250
Supelco: R47-4160

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

CAS Registry Number: 89395-25-5
Molecular Formula: C₅H₈O₆
Molecular Weight: 164.115
Accurate Mass: 164.03209
Percentage Composition: C 36.59%; H 4.91%; O 58.49%
Optical Rotation: $[\alpha]_{\text{D}}^{20} -2.6$ (c, 3.3 in H₂O)

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

CAS Registry Number: 13171-64-7
Molecular Formula: C₆H₁₀O₆
Molecular Weight: 178.141
Accurate Mass: 178.04774
Percentage Composition: C 40.45%; H 5.66%; O 53.89%
Melting Point: Mp 48°
Boiling Point: Bp_{11.5} 158°
Fluka: 95366

>>**Derivative:** Di-Et ester

CAS Registry Number: 13811-71-7
Molecular Formula: C₈H₁₄O₆
Molecular Weight: 206.195
Accurate Mass: 206.07904
Percentage Composition: C 46.60%; H 6.84%; O 46.56%
Boiling Point: Bp₁₉ 162°
Aldrich: 21396-9
Fluka: 95340
Sigma: T1888

>>**Derivative:** Diisopropyl ester

CAS Registry Number: 62961-64-2
Molecular Formula: C₁₀H₁₈O₆
Molecular Weight: 234.249
Accurate Mass: 234.11034
Percentage Composition: C 51.27%; H 7.74%; O 40.98%
Use/Importance: Catalyst for asymmetric epoxidations
Optical Rotation: $[\alpha]_{\text{D}}^{23} -17$ (neat)