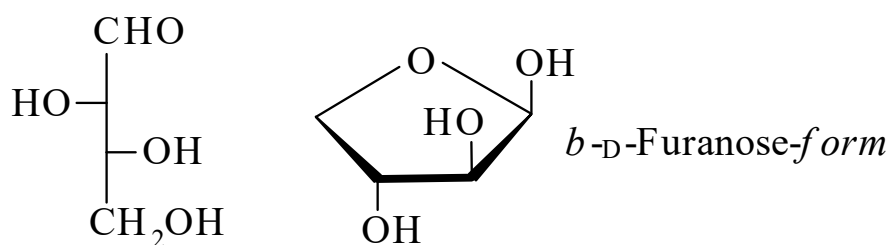




>>Entry Name: Threose, 9CI, 8CI

Synonym(s): (*R**,*S**)-2,3,4-Trihydroxybutanal



CAS Registry Number: 29884-64-8

Molecular Formula: $\text{C}_4\text{H}_8\text{O}_4$

Molecular Weight: 120.105

Accurate Mass: 120.04226

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

>>Variant: D-form

CAS Registry Number: 95-43-2

Molecular Formula: $\text{C}_4\text{H}_8\text{O}_4$

Molecular Weight: 120.105

Accurate Mass: 120.04226

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

Melting Point: Mp 126-132°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -13$ (c, 1.0 in H_2O)

Sigma: T7392

>>Derivative: Phenylsazone

Molecular Formula: $\text{C}_{16}\text{H}_{18}\text{N}_4\text{O}_2$

Molecular Weight: 298.344

Percentage Composition: C 64.41%; H 6.08%; N 18.78%; O 10.73%

Melting Point: Mp 164-165°

>>Derivative: Tri-Ac

Synonym(s): Tri-*O*-acetyl-D-threose

Molecular Formula: $\text{C}_{10}\text{H}_{14}\text{O}_7$

Molecular Weight: 246.216

Accurate Mass: 246.073955

Percentage Composition: C 48.78%; H 5.73%; O 45.49%

Melting Point: Mp 118°

Optical Rotation: $[\alpha]_{\text{D}}^{28} +35$ (c, 4.1 in CHCl_3)

>>Derivative: 2,4-*O*-Benzylidene

Synonym(s): 2,4-*O*-Benzylidene-D-threose

Molecular Formula: $\text{C}_{11}\text{H}_{12}\text{O}_4$

Molecular Weight: 208.213

Accurate Mass: 208.07356

Percentage Composition: C 63.45%; H 5.81%; O 30.74%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 165.5° (160-161°)

Optical Rotation: $[\alpha]_{\text{D}}^{22} +77.6$ (c, 2 in Py)

>>Derivative: 4-Me

Synonym(s): 4-*O*-Methyl-D-threose

CAS Registry Number: 24707-32-2

Molecular Formula: $\text{C}_5\text{H}_{10}\text{O}_4$

Molecular Weight: 134.132

Accurate Mass: 134.05791

Percentage Composition: C 44.77%; H 7.51%; O 47.71%

Physical Description: Syrup

Optical Rotation: $[\alpha]$