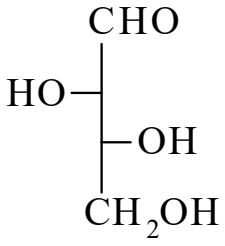
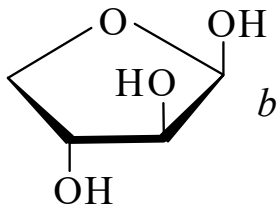
>>**Entry Name: Threose,** 9CI, 8CI
Synonym(s): (*R**,*S**)-2,3,4-Trihydroxybutanal





b-D-Furanose-*form*

CAS Registry Number: 29884-64-8

Molecular Formula: $C_4H_8O_4$
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: $C_4H_8O_4$
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: $[\alpha]_D^{20}$–13 (c, 1.0 in H_2O)
Sigma: T7392

>>**Derivative:** Phenylosazone

Molecular Formula: $C_{16}H_{18}N_4O_2$
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: $C_{10}H_{14}O_7$
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: $[\alpha]_D^{28}$+35 (c, 4.1 in $CHCl_3$)

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

Molecular Formula: $C_{11}H_{12}O_4$
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: $[\alpha]_D^{22}$+77.6 (c, 2 in Py)

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

CAS Registry Number: 24707-32-2

Molecular Formula: $C_5H_{10}O_4$
Molecular Weight: 134.132
Accurate Mass: 134.05791
Percentage Composition: C 44.77%; H 7.51%; O 47.71%
Physical Description: Syrup
Optical Rotation: [α]