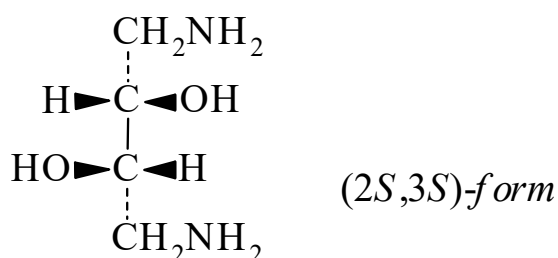




>>Entry Name: 1,4-Diamino-2,3-butanediol, 9Cl, 8Cl

Synonym(s): 2,3-Dihydroxyputrescine



CAS Registry Number: 32798-38-2

Related CAS Registry Numbers(s): 26549-22-4

Molecular Formula: C<sub>4</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>

Molecular Weight: 120.151

Accurate Mass: 120.089878

Percentage Composition: C 39.99%; H 10.07%; N 23.32%; O 26.63%

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

Molecular Formula: C<sub>4</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>

Molecular Weight: 120.151

Accurate Mass: 120.089878

Percentage Composition: C 39.99%; H 10.07%; N 23.32%; O 26.63%

>>Derivative: Di-Me ether

Synonym(s): 2,3-Dimethoxy-1,4-butanediamine

Molecular Formula: C<sub>6</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>

Molecular Weight: 148.205

Accurate Mass: 148.121178

Percentage Composition: C 48.63%; H 10.88%; N 18.90%; O 21.59%

Melting Point: Mp 272-273° (as hydrochloride)

Optical Rotation:  $[\alpha]_{\text{D}}^{23} -15.9$  (c, 1.15 in H<sub>2</sub>O)

>>Derivative: Di-Me ether, di-*N*-benzoyl

Molecular Formula: C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>

Molecular Weight: 356.421

Accurate Mass: 356.173608

Percentage Composition: C 67.40%; H 6.79%; N 7.86%; O 17.96%

Physical Description: Cryst. (C<sub>6</sub>H<sub>6</sub>/petrol)

Melting Point: Mp 137.5-139°

Optical Rotation:  $[\alpha]_{\text{D}}^{21} -10.9$  (c, 0.548 in EtOH)

>>Derivative: Di-Me ether, *N,N,N',N'*-tetra-Me

Synonym(s): 2,3-Dimethoxy-*N,N,N',N'*-tetramethyl-1,4-butanediamine, 9Cl. 1,4-Bis(dimethylamino)-2,3-dimethoxybutane

CAS Registry Number: 26549-21-3

Molecular Formula: C<sub>10</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>

Molecular Weight: 204.312

Accurate Mass: 204.183778

Percentage Composition: C 58.79%; H 11.84%; N 13.71%; O 15.66%

Use/Importance: Chiral solvent for enantioselective reactions

Boiling Point: Bp<sub>3</sub> 62-64°

Optical Rotation:  $[\alpha]_{\text{D}} +14.7$  (neat)

Aldrich: 19548-0

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

Synonym(s): (±)-form

CAS Registry Number: 18303-68-9

Molecular Formula: C<sub>4</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>

Molecular Weight: 120.151

Accurate Mass: 120.089878

Percentage Composition: C 39.99%; H 10.07%; N 23.32%; O 26.63%

Melting Point: Mp 106°

Boiling Point: Bp<sub>0.05</sub> 146°