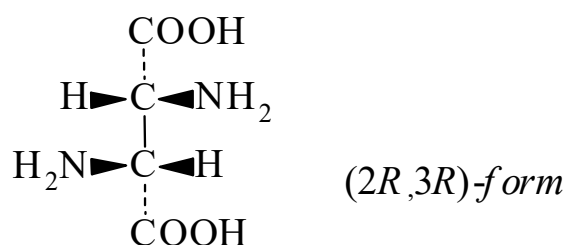




>>Entry Name: **2,3-Diaminobutanedioic acid**, 9CI

Synonym(s): 2,3-Diaminosuccinic acid



Molecular Formula: C₄H₈N₂O₄

Molecular Weight: 148.118

Accurate Mass: 148.048408

Percentage Composition: C 32.44%; H 5.44%; N 18.91%; O 43.21%

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

Synonym(s): D_S-*threo*-form

Molecular Formula: C₄H₈N₂O₄

Molecular Weight: 148.118

Accurate Mass: 148.048408

Percentage Composition: C 32.44%; H 5.44%; N 18.91%; O 43.21%

Optical Rotation: [α]_D²⁰ -18.9 (c, 0.5 in 10% HCl)

>>Derivative: *N,N'*-Dibenzoyl

Molecular Formula: C₁₈H₁₆N₂O₆

Molecular Weight: 356.334

Accurate Mass: 356.100838

Percentage Composition: C 60.67%; H 4.53%; N 7.86%; O 26.94%

Melting Point: Mp 163-164°

Optical Rotation: [α]_D²⁰ -104.2 (NH₃ aq.)

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

Molecular Formula: C₄H₈N₂O₄

Molecular Weight: 148.118

Accurate Mass: 148.048408

Percentage Composition: C 32.44%; H 5.44%; N 18.91%; O 43.21%

Biological Source: Isol. from *Streptomyces rimosus* fermentations

Melting Point: Mp 240-290 dec.°

Optical Rotation: [α]_D²⁵ +59 (c, 2 in 5% HCl)

pKa Value: p*K*_{a2} 9.1

>>Derivative: *N,N'*-Dibenzoyl

Melting Point: Mp 164-166°

Optical Rotation: [α]_D²⁵ +109 (c, 1 in MeOH)

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

Synonym(s): (±)-form

CAS Registry Number: 29276-73-1

Molecular Formula: C₄H₈N₂O₄

Molecular Weight: 148.118

Accurate Mass: 148.048408

Percentage Composition: C 32.44%; H 5.44%; N 18.91%; O 43.21%

Physical Description: Prisms + 1H₂O

Melting Point: Mp 310°

Solubility: Mod. sol. hot H₂O

Other Data: Dec. on heating

>>Derivative: Hydrochloride

Melting Point: Mp 289-291.5 dec.°