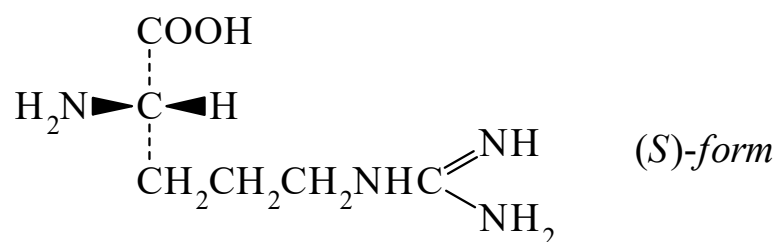




>>Entry Name: Arginine, INN, USAN

Synonym(s): 2-Amino-5-[(aminoiminomethyl)amino]pentanoic acid. 2-Amino-5-guanidinovaleric acid. Arg



CAS Registry Number: 7004-12-8

Related CAS Registry Numbers(s): 14975-30-5 32042-43-6 50912-92-0 63238-98-2 78851-84-0

Molecular Formula: C₆H₁₄N₄O₂

Molecular Weight: 174.202

Accurate Mass: 174.111676

Percentage Composition: C 41.37%; H 8.10%; N 32.16%; O 18.37%

Use/Importance: Diuretic agent

Calculated Log P Data: Log P -4.79 (calc)

>>Variant: (R)-form

Synonym(s): D-form

CAS Registry Number: 157-06-2

Molecular Formula: C₆H₁₄N₄O₂

Molecular Weight: 174.202

Accurate Mass: 174.111676

Percentage Composition: C 41.37%; H 8.10%; N 32.16%; O 18.37%

Melting Point: Mp 238 dec.°

Optical Rotation: [α]_D²⁵ -12.5 (c, 1 in H₂O). [α]_D²⁵ -27.6 (c, 1 in 5M HCl)

Fluka: 11015

Sigma: A2646

>>Derivative: Hydrochloride

CAS Registry Number: 627-75-8

Melting Point: Mp 218°

Aldrich: 85567-7

Fluka: 11050

Sigma: A6757

>>Derivative: Me ester

CAS Registry Number: 65160-70-5

Molecular Formula: C₇H₁₆N₄O₂

Molecular Weight: 188.229

Accurate Mass: 188.127326

Percentage Composition: C 44.67%; H 8.57%; N 29.77%; O 17.00%

Melting Point: Mp 193-195 dec.° (as hydrochloride)

Optical Rotation: [α]_D¹⁹ -23 (c, 1 in MeOH). [α]_D²⁵ -17 (c, 5 in H₂O)

>>Derivative: N²-Me

Synonym(s): N²-Methylarginine, 9Cl. 2-(Methylamino)-5-guanidinopentanoic acid

Molecular Formula: C₇H₁₆N₄O₂

Molecular Weight: 188.229

Accurate Mass: 188.127326

Percentage Composition: C 44.67%; H 8.57%; N 29.77%; O 17.00%

Melting Point: Mp 193-195°

Optical Rotation: [α]_D²⁰ -13.8 (H₂O). [α]_D²⁰ -29.9 (3M HCl)

>>Derivative: N^G,N^G-Di-Me

see N^G,N^G-Dimethylarginine, [BCZ76-S](#)