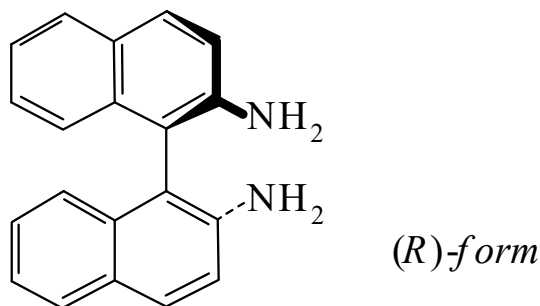




>>Entry Name: 2,2'-Diamino-1,1'-binaphthyl

Synonym(s): [1,1'-Binaphthalene]-2,2'-diamine, 9CI. 2,2'-Diamino-1,1'-dinaphthyl. 1,1'-Bi[2-naphthylamine]



CAS Registry Number: 4488-22-6

Related CAS Registry Numbers(s): 93621-61-5 97644-73-0

Molecular Formula:  $C_{20}H_{16}N_2$

Molecular Weight: 284.36

Accurate Mass: 284.131348

Percentage Composition: C 84.48%; H 5.67%; N 9.85%

Use/Importance: Intermediate for chiral auxiliaries

Hazard & Toxicity: Exp. tumourigen by skin contact. Dec. with emission of toxic fumes

>>Variant: (R)-form

CAS Registry Number: 18741-85-0

Molecular Formula:  $C_{20}H_{16}N_2$

Molecular Weight: 284.36

Accurate Mass: 284.131348

Percentage Composition: C 84.48%; H 5.67%; N 9.85%

Melting Point: Mp 242.5-243°

Optical Rotation:  $[\alpha]_D^{21} +155.5$  (c, 1 in Py).  $[\alpha]_D^{18} +46.8$  (2M HCl)

Aldrich: 38242-6

Fluka: 32787

>>Derivative: N,N'-Di-Me

Synonym(s): 2,2'-Bis(methylamino)-1,1'-binaphthyl

CAS Registry Number: 93713-30-5

Molecular Formula:  $C_{22}H_{20}N_2$

Molecular Weight: 312.413

Accurate Mass: 312.162648

Percentage Composition: C 84.58%; H 6.45%; N 8.97%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 143-144°

Optical Rotation:  $[\alpha]_D^{23} +182$  (c, 1.09 in  $C_6H_6$ )

>>Derivative: N,N,N',N'-Tetra-Me

Synonym(s): 2,2'-Bis(dimethylamino)-1,1'-binaphthyl

CAS Registry Number: 135029-77-5

Molecular Formula:  $C_{24}H_{24}N_2$

Molecular Weight: 340.467

Accurate Mass: 340.193948

Percentage Composition: C 84.67%; H 7.10%; N 8.23%

Physical Description: Cryst. (EtOH/ $C_6H_6$ )

Melting Point: Mp 216-218°

Other Data: Characterised spectroscopically

>>Derivative: N-Ph

Molecular Formula:  $C_{26}H_{20}N_2$

Molecular Weight: 360.457

Accurate Mass: 360.162648

Percentage Composition: C 86.64%; H 5.59%; N 7.77%

Melting Point: Mp 240-241°

Optical Rotation:  $[\alpha]_D +131$  (c, 0.4 in THF)