



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

CAS Registry Number: 5324-31-2

Molecular Formula: C₂₀H₂₈N₂

Molecular Weight: 296.455

Accurate Mass: 296.225248

Percentage Composition: C 81.03%; H 9.52%; N 9.45%

Physical Description: Cryst.

Melting Point: Mp 72.2°

Other Data: Nematic phase at 96.5°

>>Derivative: *N,N'*-Di-Ph

Synonym(s): *N,N'*-Diphenyl-[1,1'-biphenyl]-4,4'-diamine, 9Cl. 4,4'-Dianilinobiphenyl. *N,N'*-Diphenylbenzidine

CAS Registry Number: 531-91-9

Molecular Formula: C₂₄H₂₀N₂

Molecular Weight: 336.435

Accurate Mass: 336.162648

Percentage Composition: C 85.68%; H 5.99%; N 8.33%

Use/Importance: Used as 0.1% soln. in conc. H₂SO₄ or in conc. H₂SO₄/AcOH as redox indicator; photometric detn. of V(*V*)

Physical Description: Plates (xylene)

Melting Point: Mp 244-245°. Mp 251-252°

Solubility: Sol. conc. H₂SO₄, CCl₄, AcOH; spar. sol. EtOH

Other Data: E° +0.76V (20°, pH 0)

Aldrich: D20520-6

Fluka: 42790

Rare Chemicals Library: S26381-8

Sigma: D3393

>>Derivative: *N,N'*-Di-Ph, *N,N'*-di-Me

CAS Registry Number: 27164-41-6

Molecular Formula: C₂₆H₂₄N₂

Molecular Weight: 364.489

Accurate Mass: 364.193948

Percentage Composition: C 85.68%; H 6.64%; N 7.69%

Use/Importance: Used as 0.1% soln. in conc. H₂SO₄ as redox indicator (colour change; colourless → blue); used for photometric detn. of V (λ_{max} 529 nm, ε 45000)

Physical Description: Cryst. (toluene)

Solubility: Sol. hot toluene, AcOH, conc. H₂SO₄; sp. sol. EtOH, C₆H₆

>>Derivative: *N,N,N',N'*-Tetra-Ph

CAS Registry Number: 15546-43-7

Molecular Formula: C₃₆H₂₈N₂

Molecular Weight: 488.631

Accurate Mass: 488.225248

Percentage Composition: C 88.49%; H 5.78%; N 5.73%

Use/Importance: Charge-transporting agent in xerography

Physical Description: Fine cryst.

Melting Point: Mp 230-231°

Rare Chemicals Library: S28377-0

>>Derivative: *N,N'*-Bis(3-methylphenyl), *N,N'*-di-Ph

CAS Registry Number: 65181-78-4

Molecular Formula: C₃₈H₃₂N₂

Molecular Weight: 516.684

Accurate Mass: 516.256548

Percentage Composition: C 88.34%; H 6.24%; N 5.42%

Use/Importance: Charge transport agent for electrophotographic photoreceptors

Physical Description: Solid (MeOH/THF)