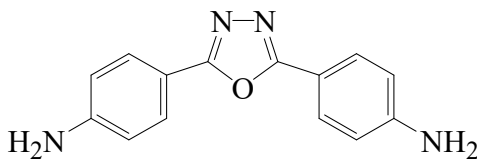




>>Entry Name: **2,5-Bis(4-aminophenyl)-1,3,4-oxadiazole**

Synonym(s): 4,4'-(1,3,4-Oxadiazole-2,5-diyl)bisbenzenamine, 9CI



CAS Registry Number: 2425-95-8

Molecular Formula: C₁₄H₁₂N₄O

Molecular Weight: 252.275

Accurate Mass: 252.101111

Percentage Composition: C 66.66%; H 4.79%; N 22.21%; O 6.34%

Use/Importance: Precursor for azo dyes

Physical Description: Needles; cryst. (EtOAc or EtOH)

Melting Point: Mp 262.5-263° (250.5-252.5°)

Aldrich: 33352-2

Sigma: A0661

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

Synonym(s): 2,5-Bis(4-dimethylaminophenyl)-1,3,4-oxadiazole

CAS Registry Number: 32444-53-4

Molecular Formula: C₁₈H₂₀N₄O

Molecular Weight: 308.382

Accurate Mass: 308.163711

Percentage Composition: C 70.11%; H 6.54%; N 18.17%; O 5.19%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 225-227°

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

Synonym(s): 2,5-Bis(4-diethylaminophenyl)-1,3,4-oxadiazole

CAS Registry Number: 1679-98-7

Molecular Formula: C₂₂H₂₈N₄O

Molecular Weight: 364.489

Accurate Mass: 364.226311

Percentage Composition: C 72.50%; H 7.74%; N 15.37%; O 4.39%

Use/Importance: Charge-transporting agent in electrophotographic photoreceptors

Melting Point: Mp 148-151° (from Aldrich catalogue)

References:

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Preston, J., *J. Het. Chem.*, 1965, **2**, 441-446, (*synth*)

Levin, Ya.A. *et al.*, *Khim. Geterotsikl. Soedin.*, 1967, 1114-1116; *Chem. Heterocycl. Compd. (Engl. Transl.)*, 1967, 864-865, (*synth*)

Frost, L.W. *et al.*, *J. Polym. Sci.*, 1968, **6A-I**, 215-233, (*synth*)

Hirai, K. *et al.*, *Bull. Chem. Soc. Jpn.*, 1994, **67**, 1258-1264, (*synth*)