



>>Entry Name: *N,N'*-Diphenylbenzamidine, 8Cl

Synonym(s): *N,N'*-Diphenylbenzenecarboximidamide, 9Cl

CAS Registry Number: 2556-46-9

Related CAS Registry Numbers(s): 59387-41-6

Type of Compound Code(s): PS7700 PA1650 PS8300 PA2350

PhN=CPhNPh

Molecular Formula: C₁₉H₁₆N₂

Molecular Weight: 272.349

Accurate Mass: 272.131348

Percentage Composition: C 83.79%; H 5.92%; N 10.29%

Use/Importance: Used as a 7mM soln. in CHCl₃ for extraction-photometric detn. of Au(III) ($\lambda_{\max}$ 395 nm, ϵ 12000) and Mo ($\lambda_{\max}$ 465 nm, ϵ 17000)

Physical Description: Leaflets (EtOH)

Melting Point: Mp 148-149° (144-145°)

Solubility: Sol. CHCl₃, C₆H₆, EtOAc, EtOH, Et₂O

>>Derivative: Hydrochloride

CAS Registry Number: 5014-74-4

Melting Point: Mp 297-299°

>>Derivative: Picrate

Melting Point: Mp 215-216°

>>Derivative: *N*-Hydroxy

Synonym(s): *N*-Hydroxy-*N,N'*-diphenylbenzenecarboximidamide, 9Cl

CAS Registry Number: 53170-30-2

Type of Compound Code(s): PS7700 PA4900 PA2400 PA2000 PS7750 PS8300

Molecular Formula: C₁₉H₁₆N₂O

Molecular Weight: 288.348

Accurate Mass: 288.126263

Percentage Composition: C 79.14%; H 5.59%; N 9.72%; O 5.55%

Use/Importance: Used as a 3mM soln. in Me₂CO for photometric detn. of Fe(III) ($\lambda_{\max}$ 560 nm), V(V) ($\lambda_{\max}$ 560 nm, ϵ 4210); as a 0.1% soln. in EtOH or CHCl₃ for extraction-photometric detn. of Ni, gravimetric detn. of Ni

Physical Description: Pale yellow cryst. (petrol/C₆H₆)

Melting Point: Mp 163° (170°)

Solubility: Sol. CHCl₃; mod. sol. C₆H₆, CCl₄, EtOAc

References:

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Briggs, L.H. *et al.*, *Aust. J. Chem.*, 1976, **29**, 357, (*synth, deriv*)
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