



>>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: C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>

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 CHCl<sub>3</sub> for extraction-photometric detn. of Au(III) ( $\lambda_{\max}$  395 nm,  $\epsilon$  12000) and Mo ( $\lambda_{\max}$  465 nm,  $\epsilon$  17000)

Physical Description: Leaflets (EtOH)

Melting Point: Mp 148-149° (144-145°)

Solubility: Sol. CHCl<sub>3</sub>, C<sub>6</sub>H<sub>6</sub>, EtOAc, EtOH, Et<sub>2</sub>O

>>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: C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>O

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 Me<sub>2</sub>CO for photometric detn. of Fe(III) ( $\lambda_{\max}$  560 nm), V(V) ( $\lambda_{\max}$  560 nm,  $\epsilon$  4210); as a 0.1% soln. in EtOH or CHCl<sub>3</sub> for extraction-photometric detn. of Ni, gravimetric detn. of Ni

Physical Description: Pale yellow cryst. (petrol/C<sub>6</sub>H<sub>6</sub>)

Melting Point: Mp 163° (170°)

Solubility: Sol. CHCl<sub>3</sub>; mod. sol. C<sub>6</sub>H<sub>6</sub>, CCl<sub>4</sub>, EtOAc

#### References:

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Zimmer, H. *et al.*, *Tet. Lett.*, 1968, 176  
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