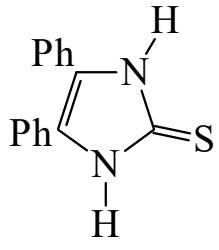
>>**Entry Name: 1,3-Dihydro-4,5-diphenyl-2*H*-imidazole-2-thione,** 9CI
Synonym(s): 4,5-Diphenyl-2(3*H*)-imidazolethione. 2-Mercapto-4,5-diphenylglyoxaline. Diphenylthioglyoxalone. 4,5-Diphenylimidazole-2-thiol, 8CI



CAS Registry Number: 2349-58-8
Extra CAS Registry Numbers(s): 3718-54-5

Molecular Formula: $C_{15}H_{12}N_2S$
Molecular Weight: 252.339
Accurate Mass: 252.072118
Percentage Composition: C 71.40%; H 4.79%; N 11.10%; S 12.71%
Use/Importance: Used as a 0.01*M* soln. in pentanol for extraction-photometric detn. of Pd (λ_{max} 440 nm, ε 6500)
Physical Description: Cryst. (AcOH)
Melting Point: Mp 260°. Mp 325°
Solubility: Sol. H_2O, EtOH

Aldrich: 12789-2
Fluka: 43085

>>**Derivative:** *N*-Me

CAS Registry Number: 16116-43-1
Molecular Formula: $C_{16}H_{14}N_2S$
Molecular Weight: 266.366
Accurate Mass: 266.087768
Percentage Composition: C 72.15%; H 5.30%; N 10.52%; S 12.04%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 279-281°

>>**Derivative:** Disulfide
Synonym(s): 2,2'-Dithiobis(4,5-diphenyl-1*H*-imidazole), 9CI

CAS Registry Number: 16116-44-2
Molecular Formula: $C_{30}H_{22}N_4S_2$
Molecular Weight: 502.663
Accurate Mass: 502.128586
Percentage Composition: C 71.68%; H 4.41%; N 11.15%; S 12.76%
Physical Description: Cryst.
Melting Point: Mp 222-225 dec.°

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