



>>Entry Name: 4-Amino-4'-nitrodiphenyl sulfide

Synonym(s): 4-[(4-Nitrophenyl)thio]benzenamine, 9Cl. *p*-(*p*-Nitrophenylthio)aniline, 8Cl. 4-Aminophenyl 4-nitrophenyl sulfide

CAS Registry Number: 101-59-7

Molecular Formula: C₁₂H₁₀N₂O₂S

Molecular Weight: 246.289

Accurate Mass: 246.046298

Percentage Composition: C 58.52%; H 4.09%; N 11.37%; O 12.99%; S 13.02%

Physical Description: Orange prisms with blue reflex (C₆H₆), cryst. (EtOH)

Melting Point: Mp 146-147°

Aldrich: A6918-8

>>Derivative: N-Ac

CAS Registry Number: 7467-51-8

Molecular Formula: C₁₄H₁₂N₂O₃S

Molecular Weight: 288.326

Accurate Mass: 288.056863

Percentage Composition: C 58.32%; H 4.19%; N 9.72%; O 16.65%; S 11.12%

Physical Description: Pale-yellow cryst. (EtOH)

Melting Point: Mp 196.5-198°

>>Derivative: S-Oxide

Synonym(s): 4-[(4-Nitrophenyl)sulfinyl]benzenamine

CAS Registry Number: 5461-23-4

Molecular Formula: C₁₂H₁₀N₂O₃S

Molecular Weight: 262.289

Accurate Mass: 262.041213

Percentage Composition: C 54.95%; H 3.84%; N 10.68%; O 18.30%; S 12.23%

Melting Point: Mp 132-134°

>>Derivative: S,S-Dioxide

Synonym(s): 4-Amino-4'-nitrodiphenyl sulfone. 4-[(4-Nitrophenyl)sulfonyl]benzenamine

CAS Registry Number: 1948-92-1

Molecular Formula: C₁₂H₁₀N₂O₄S

Molecular Weight: 278.288

Accurate Mass: 278.036128

Percentage Composition: C 51.79%; H 3.62%; N 10.07%; O 23.00%; S 11.52%

Physical Description: Cryst.

Melting Point: Mp 167-169°

Aldrich: 24870-3

References:

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Greidanus, J.W. *et al.*, *Can. J. Chem.*, 1969, **47**, 803, (*synth, nmr*)

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