



>>Entry Name: *N,N*-Dimethylthiourea, 9CI

CAS Registry Number: 6972-05-0

Extra CAS Registry Numbers(s): 61805-96-7
Me2NCSNH2

Molecular Formula: C3H8N2S

Molecular Weight: 104.176

Accurate Mass: 104.040818

Percentage Composition: C 34.59%; H 7.74%; N 26.89%; S 30.78%

Physical Description: Cryst. (EtOH or 2-propanol)

Melting Point: Mp 166° (158-159°)

>>Derivative: *N*-Benzoyl

Synonym(s): *N*-Benzoyl-*N,N'*-dimethylthiourea

Type of Compound Code(s): PA3350 PS7700

Molecular Formula: C10H12N2OS

Molecular Weight: 208.284

Accurate Mass: 208.067033

Percentage Composition: C 57.67%; H 5.81%; N 13.45%; O 7.68%; S 15.40%

Use/Importance: Used as a 0.1*M* soln. in toluene for extraction-separation of platinum group metals

Physical Description: Cryst. (EtOH)

Melting Point: Mp 128°

Solubility: Sol. toluene, CHCl3

References:

- Kurzer, F. *et al.*, *J.C.S.*, 1957, 4461, (*synth, bibl*)
Nair, G.V., *Indian J. Chem.*, 1966, **4**, 516, (*synth*)
Fabian, J. *et al.*, *Tetrahedron*, 1967, **23**, 4323, (*uv*)
Baldwin, M.A. *et al.*, *Org. Mass Spectrom.*, 1970, **4**, 81, (*ms*)
Filleux-Blanchard, M.-L. *et al.*, *Bull. Soc. Chim. Fr.*, 1972, 4710, (*pmr*)
Hartmann, H. *et al.*, *J. Prakt. Chem.*, 1973, **315**, 144, (*synth*)
Filleux-Blanchard, M.-L., *Org. Magn. Reson.*, 1977, **9**, 125, (*cmr*)
Dwarakanath, K. *et al.*, *Indian J. Pure Appl. Phys.*, 1979, **17**, 171, (*ir*)
Meakins, G.D. *et al.*, *J.C.S. Perkin 1*, 1983, 341, (*synth*)
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