



>>Entry Name: 4-Phenylthiosemicarbazide

Synonym(s): *N*-Phenylhydrazinecarbothioamide, 9CI

CAS Registry Number: 5351-69-9

PhNHCSNHNH₂

Molecular Formula: C₇H₉N₃S

Molecular Weight: 167.234

Accurate Mass: 167.051717

Percentage Composition: C 50.28%; H 5.42%; N 25.13%; S 19.17%

Use/Importance: Used for photometric detn. of Se and Te (reagent acts as reductor in acid medium)

Physical Description: Plates (EtOH)

Melting Point: Mp 138-140°

Solubility: Sol. EtOH

Aldrich: 13148-2

Fluka: 79200

Rare Chemicals Library: S43813-8

References:

Aldrich Library of Infrared Spectra, 3rd edn., 1981, 1108B, (*ir*)

Czugler, M. *et al.*, *Cryst. Struct. Commun.*, 1973, **6**, 645, (*cryst struct*)

Furlani, C. *et al.*, *Gazz. Chim. Ital.*, 1973, **103**, 951, (*synth*)

Floresan, E. *et al.*, *Chujul Med.*, 1982, **55**, 144; *CA*, **98**, 154478x, (*detn, Se, Te*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PGN000