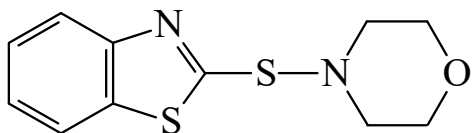




>>Entry Name: 4-(2-Benzothiazolylthio)morpholine, 10CI

Synonym(s): 2-(4-Morpholinylthio)benzothiazole, 9CI. NOBS Special. Nocceler MSA. Sulfenamide M. Amax



CAS Registry Number: 102-77-2

Molecular Formula: C₁₁H₁₂N₂OS₂

Molecular Weight: 252.361

Accurate Mass: 252.039103

Percentage Composition: C 52.35%; H 4.79%; N 11.10%; O 6.34%; S 25.41%

Use/Importance: Vulcanization accelerator

Physical Description: Cryst. (EtOH)

Melting Point: Mp 85-86°

Rare Chemicals Library: S36399-5

References:

Carr, E.L. *et al.*, *J.O.C.*, 1949, **14**, 935, (*synth*)

Guzman, J. *et al.*, *J. Het. Chem.*, 1978, **15**, 1531, (*conformn*)

Torii, S. *et al.*, *J.O.C.*, 1978, **43**, 3223, (*synth*)

Brownbridge, P. *et al.*, *Phosphorus Sulfur Relat. Elem.*, 1988, **35**, 311, (*synth*)

Akchurina, R.A., *Zh. Prikl. Khim. (Leningrad)*, 1989, **62**, 630, (*synth*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BDG000