

Table 1 Thiol Ester obtained by the New Method³⁾

entry	thiol ester (bp ^{*1})	yield ^{*2}	entry	thiol ester (bp ^{*1} or mp)	yield ^{*2}
1	C ₆ H ₅ COS-t-Bu (bp _{1.0} 125 - 127°)	87.1	7	c-C ₆ H ₁₁ COS-2-pyridyl (mp 88 - 90°) ^{*3}	83.0
2	o-OH-C ₆ H ₄ -COS-Et (bp _{1.0} 118 - 120°)	87.0	8	Bzl-OCNHCH ₂ CH(OH)CH ₂ COSEt (viscous material)	85.4
3	o-Cl-C ₆ H ₄ -COS-t-Bu (bp _{1.0} 145 - 148°)	quant.	9	MeOCOCH ₂ COS-C ₆ H ₅ (bp _{1.0} 160 - 163°)	quant.
4	3-pyridyl-COS-t-Bu (bp _{1.0} 137 - 140°)	quant.	10	t-Bu-OCOCH ₂ COS-C ₆ H ₅ (bp _{1.0} 169 - 173°)	85.5
5	t-Bu-COS-t-Bu (bp _{2.1} 101 - 103°)	87.2	11	EtOCOCH(Bzl)COS-t-Bu (bp _{1.0} 175 - 178°)	quant.
6	c-C ₆ H ₁₁ -COS-t-Bu (bp _{2.0} 90 - 92°)	90.0	12	EtOCOCH(CH ₂ CH=CH ₂)COSEt (bp _{2.0} 134 - 135°)	76.2

*1 pressure unit : mmHg

*2 isolated yield

*3 pale yellow needles (n-hexane)

References and Footnotes

- 1) a) H.-U.Reiwig and B.Scherer, *Tetrahedron Lett.*, 21, 4259 (1980); literatures therein.
 b) G.S.Bates, J.Diakur, and S.Masamune, *ibid.*, 17, 4423 (1976); literatures therein.
 c) H.-J.Liu, S.P.Lee, and W.H.Chan, *Synth. Commun.*, 9, 91 (1979); literatures therein.
 d) H.-J.Liu, S.K.Attah-Poku, and H.K.Lai, *ibid.*, 9, 883 (1979); literatures therein.
- 2) Malonic half-thiol esters are of interest because of close relations to malonyl S-CoA and have been noticed recently as useful materials for organic synthesis. [D.W.Brooks, L-D.Lu, and S.Masamune, *Angew. Chem. Int. Ed. Engl.*, 18, 72 (1979)]
- 3) Spectral and analytical data of all compounds shown in Table 1 were consistent with their structures.

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