>>**Entry Name: 4-Chloro-2-thiophenecarboxylic acid,** 9Cl

CAS Registry Number: 59614-95-8
Structure by analogy with 2-Chloro-3-thiophenecarboxylic acid, GDH36-E

Molecular Formula: $C_5H_3ClO_2S$
Molecular Weight: 162.596
Accurate Mass: 161.954227
Percentage Composition: C 36.94%; H 1.86%; Cl 21.80%; O 19.68%; S 19.72%
Physical Description: Cryst. (CH_2Cl_2 or MeOH)
Melting Point: Mp 131-132°. Mp 138-140°

>>**Derivative:** Me ester

Molecular Formula: $C_6H_5ClO_2S$
Molecular Weight: 176.623
Accurate Mass: 175.969877
Percentage Composition: C 40.80%; H 2.85%; Cl 20.07%; O 18.12%; S 18.16%
Physical Description: Liq.
Boiling Point: Bp_{21} 115-117°

>>**Derivative:** Et ester

CAS Registry Number: 59614-94-7
Molecular Formula: $C_7H_7ClO_2S$
Molecular Weight: 190.65
Accurate Mass: 189.985527
Percentage Composition: C 44.10%; H 3.70%; Cl 18.60%; O 16.78%; S 16.82%

References:

Iriarte, J. *et al.*, *J. Het. Chem.*, 1976, **13**, 393, *(synth)*
Satonaka, H.*, Bull. Chem. Soc. Jpn.*, 1983, **56**, 2463, *(deriv)*
Raggon, J.W. *et al.*, *Org. Prep. Proced. Int.*, 1995, **27**, 233, *(synth, pmr, ir)*