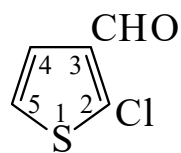




>>Entry Name: 2-Chloro-3-thiophenecarboxaldehyde, 9Cl

Synonym(s): 2-Chloro-3-formylthiophene



CAS Registry Number: 14345-98-3

Molecular Formula: C₅H₃ClOS

Molecular Weight: 146.597

Accurate Mass: 145.959312

Percentage Composition: C 40.97%; H 2.06%; Cl 24.18%; O 10.91%; S 21.87%

Physical Description: Liq. which solidifies on standing

Melting Point: Mp 25°

Boiling Point: Bp_{1.5} 100-102° (lit. gives a pressure range). Bp_{0.1} 60-62°

Refractive Index: n_D²⁰ 1.5908

>>Derivative: Oxime

CAS Registry Number: 24783-03-7

Molecular Formula: C₅H₄ClNOS

Molecular Weight: 161.611

Accurate Mass: 160.970211

Percentage Composition: C 37.16%; H 2.49%; Cl 21.94%; N 8.67%; O 9.90%; S 19.84%

Physical Description: Cryst. (C₆H₆/petrol)

Melting Point: Mp 105-110°

>>Derivative: 2,4-Dinitrophenylhydrazone

Physical Description: Needles (CHCl₃)

Melting Point: Mp 214°

>>Derivative: Thiosemicarbazone

Physical Description: Yellow cryst. (EtOH aq.)

Melting Point: Mp 196-198 dec.°

>>Derivative: Di-Me acetal

Synonym(s): 2-Chloro-3-(dimethoxymethyl)thiophene, 9Cl

CAS Registry Number: 65762-92-7

Molecular Formula: C₇H₉ClO₂S

Molecular Weight: 192.666

Accurate Mass: 192.001177

Percentage Composition: C 43.64%; H 4.71%; Cl 18.40%; O 16.61%; S 16.64%

Physical Description: Liq.

Boiling Point: Bp_{0.1} 50-52°

References:

Campaigne, E. *et al.*, *J.A.C.S.*, 1949, **71**, 333; 1953, **75**, 988, (*synth, deriv*)

Yom-Tov, B. *et al.*, *Chem. Scr.*, 1973, **3**, 37, (*synth, pmr, ir*)

Gronowitz, S. *et al.*, *J. Het. Chem.*, 1976, **13**, 1099, (*synth, pmr*)

Meth-Cohn, O. *et al.*, *J. Chem. Res., Miniprint*, 1977, 3262, (*synth, pmr, deriv*)