>>**Entry Name: 9-Phenanthrenol,** 9Cl
Synonym(s): 9-Phenanthrol, 8Cl. 9-Hydroxyphenanthrene. 9(10*H*)-Phenanthrenone. Phenanthrone

CAS Registry Number: 484-17-3

Molecular Formula: $C_{14}H_{10}O$
Molecular Weight: 194.232
Accurate Mass: 194.073165
Percentage Composition: C 86.57%; H 5.19%; O 8.24%

Physical Description: Cryst. (petrol or C_6H_6)
Melting Point: Mp 158° (151°)
Boiling Point: $Bp_{0.2}$ 140-145° subl.
Other Data: Oxid. in air

Aldrich: 21128-1
Rare Chemicals Library: S61256-1

>>**Derivative:** Picrate

Physical Description: Red cryst.
Melting Point: Mp 185°

>>**Derivative:** Ac

CAS Registry Number: 957-82-4
Molecular Formula: $C_{16}H_{12}O_2$
Molecular Weight: 236.27
Accurate Mass: 236.08373
Percentage Composition: C 81.34%; H 5.12%; O 13.54%
Physical Description: Cryst. (petrol or EtOH aq.)
Melting Point: Mp 77-78°

>>**Derivative:** Benzoyl

Molecular Formula: $C_{21}H_{14}O_2$
Molecular Weight: 298.34
Accurate Mass: 298.09938
Percentage Composition: C 84.54%; H 4.73%; O 10.73%
Melting Point: Mp 99-100°

>>**Derivative:** Me ether
Synonym(s): 9-Methoxyphenanthrene, 9Cl

CAS Registry Number: 5085-74-5
Molecular Formula: $C_{15}H_{12}O$
Molecular Weight: 208.259
Accurate Mass: 208.088815
Percentage Composition: C 86.51%; H 5.81%; O 7.68%
Physical Description: Cryst. (MeOH)
Melting Point: Mp 96-97°

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 1114C, *(ir)*
Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 314B, *(nmr)*
Hunsberger, I.M. *et al.*, *J.A.C.S.*, 1952, **74**, 4839-4845, *(ir)*
Nishimoto, K.*, Bull. Chem. Soc. Jpn.*, 1966, **39**, 645-650, *(uv)*
Bacon, R.G.R. *et al.*, *Chem. Ind. (London)*, 1966, 812, *(synth)*
Koichi, S. *et al.*, *Chem. Pharm. Bull.*, 1973, **21**, 2809-2811, *(synth)*
Furusho, Y. *et al.*, *J.C.S. Perkin 1*, 1996, 183-190, *(Me ether, **synth**, pmr)*
Fu, J. *et al.*, *Can. J. Chem.*, 2000, **78**, 905-919, *(synth)*