



>>Entry Name: 4-Nonanone, 9Cl

ENTRY UNDER REVIEW

Synonym(s): Amyl propyl ketone. Pentyl propyl ketone

CAS Registry Number: 4485-09-0

$\text{H}_3\text{C}(\text{CH}_2)_4\text{CO}(\text{CH}_2)_2\text{CH}_3$

Molecular Formula: $\text{C}_9\text{H}_{18}\text{O}$

Molecular Weight: 142.241

Accurate Mass: 142.135765

Percentage Composition: C 76.00%; H 12.75%; O 11.25%

Biological Source: Isol. from lemongrass

Use/Importance: Alarm pheromone in ants and hornets

Physical Description: Liq.

Boiling Point: Bp 187-188°. Bp₂₀ 75-76°

Rare Chemicals Library: S41182-5

>>Derivative: Semicarbazone

Physical Description: Cryst. (EtOH or petrol)

Melting Point: Mp 73-74° (rapid heat) (67°, 145°)

>>Derivative: 4-Nitrophenylhydrazone

Physical Description: Unstable yellow cryst. (EtOH) or light-yellow plates (petrol)

Melting Point: Mp 84-85°

References:

Bryant, S.A. *et al.*, *J.C.S.*, 1931, 2080, (*synth*)

Brodman, B.W. *et al.*, *Sep. Sci. Technol.*, 1967, **2**, 139, (*cryst struct*)

Soussan, G. *et al.*, *Bull. Soc. Chim. Fr.*, 1972, 4228, (*synth*)

Sheikh, M.Y. *et al.*, *Tet. Lett.*, 1972, 257, (*synth*)

McAdoo, D.J. *et al.*, *Org. Mass Spectrom.*, 1974, **9**, 525, (*ms*)

Kende, A.S. *et al.*, *Synth. Commun.*, 1978, **8**, 59, (*synth*)