



>>Entry Name: **2,5-Bis(*tert*-butylperoxy)-2,5-dimethylhexane**

Synonym(s): (1,1,4,4-Tetramethyl-1,4-butanediyl)bis[(1,1-dimethylethyl) peroxide], 9CI. (1,1,4,4-Tetramethyltetramethylene)bis(*tert*-butyl peroxide), 8CI

CAS Registry Number: 78-63-7

$(\text{H}_3\text{C})_3\text{COOC}(\text{CH}_3)_2\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{OOC}(\text{CH}_3)_3$

Molecular Formula: $\text{C}_{16}\text{H}_{34}\text{O}_4$

Molecular Weight: 290.442

Accurate Mass: 290.24571

Percentage Composition: C 66.17%; H 11.80%; O 22.03%

Use/Importance: Cross-linking agent. Polym. initiator

Physical Description: Liq.

Melting Point: Mp 8°

Boiling Point: Bp₃₀ 87-90°. Bp₇ 55-57°. Bp_{0.1} 50-52°

Density: d_4^{25} 0.865

Refractive Index: n_D^{20} 1.4210

Aldrich: 38809-2

References:

U.S. Pat., 1959, 3 086 966; *CA*, **59**, 11257e, (*synth*)

U.K. Pat., 1964, 954 361; *CA*, **61**, 4270f, (*synth*)

U.S. Pat., 1964, 3 135 805; *CA*, **61**, 4220a, (*synth*)

Swern, D. *et al.*, *Anal. Chem.*, 1969, **41**, 412, (*pmr*)