



>>Entry Name: **2,5-Dimethyl-2,4-hexadiene**, 9CI

Synonym(s): 1,1,4,4-Tetramethyl-1,3-butadiene

CAS Registry Number: 764-13-6

$(\text{H}_3\text{C})_2\text{C}=\text{CHCH}=\text{C}(\text{CH}_3)_2$

Molecular Formula: C_8H_{14}

Molecular Weight: 110.199

Accurate Mass: 110.10955

Percentage Composition: C 87.20%; H 12.80%

Use/Importance: Important intermed. in coml. synth. of Chrysanthemic acid [JWW14-D](#)

Melting Point: Mp 15°

Boiling Point: Bp 133-136°. Bp₁₀ 28°

Density: d_4^{18} 0.765

Refractive Index: $n_D^{19.5}$ 1.4796

Other Data: Undergoes cationic polym.

Aldrich: 34431-1

Fluka: 40480

Sigma: D4525

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 40C, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 32D, (ir)

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Registry of Mass Spectral Data, Wiley, 124-5, (ms)

Sadtler Standard C-13 NMR Spectra, 700, (cmr)

Sadtler Standard Infrared Spectra, 464, (ir)

Sadtler Standard NMR Spectra, 21809, (pmr)

Sadtler Standard Ultraviolet Spectra, 1457, (uv)

Moody, F.B., *Macromol. Synth.*, 1963, **1**, 67, (polym)

Kauffmann, T. *et al.*, *Angew. Chem., Int. Ed.*, 1967, **6**, 85, (synth)

Volger, H.C., *Rec. Trav. Chim. (J. R. Neth. Chem. Soc.)*, 1967, **86**, 677, (synth)

Tonkyn, R.G., *J. Polym. Sci.*, 1969, **7**, 1569, (synth)

Gassman, P.G. *et al.*, *J.A.C.S.*, 1971, **93**, 1812, (synth)

Gassman, P.G. *et al.*, *Tet. Lett.*, 1971, 1409, (synth)

Holland, D. *et al.*, *Chem. Ind. (London)*, 1979, 707, (synth)

Malanga, M. *et al.*, *J. Macromol. Sci., Chem., Part A*, 1985, **22**, 1623, (polym)