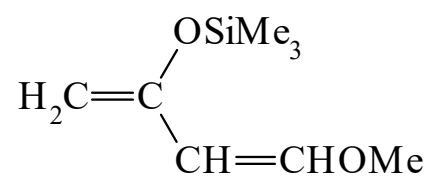




>>Entry Name: 1-Methoxy-3-(trimethylsilyloxy)-1,3-butadiene

Synonym(s): [(3-Methoxy-1-methylene-2-propenyl)oxy]trimethylsilane, 9CI. Danishefsky's diene



CAS Registry Number: 59414-23-2

Related CAS Registry Numbers(s): 124306-13-4

Molecular Formula: C₈H₁₆O₂Si

Molecular Weight: 172.299

Accurate Mass: 172.091957

Percentage Composition: C 55.77%; H 9.36%; O 18.57%; Si 16.30%

Sigma: M4906

>>Variant: (*E*)-form

CAS Registry Number: 54125-02-9

Molecular Formula: C₈H₁₆O₂Si

Molecular Weight: 172.299

Accurate Mass: 172.091957

Percentage Composition: C 55.77%; H 9.36%; O 18.57%; Si 16.30%

Source/Synthesis: Synth. from MeCOCH=CHOMe, Me₃SiCl and Et₃N in presence of ZnCl₂ in C₆H₆

Use/Importance: Diels-Alder diene; undergoes [4+2] cycloaddn. with aldehydes or imines in presence of BF₃ or ZnCl₂

Physical Description: Liq.

Boiling Point: Bp₁₄ 68-69°. Bp₅ 54-55°

Refractive Index: n_D²⁰ 1.4560

Aldrich: 21283-0

Fluka: 65368

References:

Danishefsky, S. *et al.*, *J.A.C.S.*, 1974, **96**, 7807; 1977, **99**, 6066; 1978, **100**, 6536; 1982, **104**, 358, (*synth, ir, pmr, use*)

Jackson, D.A. *et al.*, *Chem. Comm.*, 1981, 478, (*use, cycloaddn*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1982, **10**, 260, (*use*)

Kerwin, J.F. *et al.*, *Tet. Lett.*, 1982, **23**, 3739, (*use, cycloaddn*)

Org. Synth., 1983, **61**, 147, (*synth*)

Sera, A. *et al.*, *Heterocycles*, 1991, **32**, 273, (*use*)

Page, P.C.B. *et al.*, *Synlett*, 1991, 84, (*use*)

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