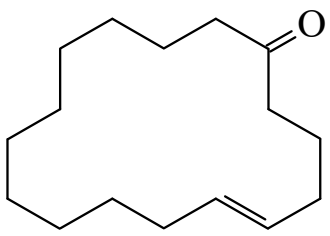
>>**Entry Name: 5-Cyclohexadecen-1-one,** 9CI
Synonym(s): Musk TM



(*E*)-*form*

CAS Registry Number: 37609-25-9

Molecular Formula: $C_{16}H_{28}O$
Molecular Weight: 236.397
Accurate Mass: 236.214015
Percentage Composition: C 81.29%; H 11.94%; O 6.77%
Use/Importance: Artificial musk used in perfumery
Other Data: Comly. available as a mixt. of (*E*)- and (*Z*)-isomers

>>**Variant:** (*E*)-form

CAS Registry Number: 35951-24-7
Molecular Formula: $C_{16}H_{28}O$
Molecular Weight: 236.397
Accurate Mass: 236.214015
Percentage Composition: C 81.29%; H 11.94%; O 6.77%
Melting Point: Mp 11-12.5°
Boiling Point: $Bp_{0.1}$ 114°

>>**Variant:** (*Z*)-form

CAS Registry Number: 21944-95-6
Molecular Formula: $C_{16}H_{28}O$
Molecular Weight: 236.397
Accurate Mass: 236.214015
Percentage Composition: C 81.29%; H 11.94%; O 6.77%
Melting Point: Mp 36-37°
Boiling Point: $Bp_{0.5}$ 137°

References:

Watanabe, S. *et al.*, *J. Appl. Chem. Biotechnol.*, 1973, **23**, 501, *(synth)*
Kato, T. *et al.*, *Bull. Chem. Soc. Jpn.*, 1980, **53**, 2958, *(synth, ir, pmr)*
Bluthe, N. *et al.*, *Tetrahedron*, 1984, **40**, 3277, *(synth)*
Sato, K. *et al.*, *Bull. Chem. Soc. Jpn.*, 1999, **72**, 2287-2306, *(synth, pmr, cmr)*