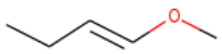
trans-1-Methoxy-1-butene

Other names: (1E)-1-Butenyl methyl ether; (E)-1-Methoxy-1-butene; (E)-CH3CH2CH=CH(OCH3).
InChI: InChI=1S/C5H10O/c1-3-4-5-6-2/h4-5H,3H2,1-2H3/b5-4+
InChI Key: KMQWOHBEYVPGQJ-SNAWJCMRSA-N
Formula: C5H10O
SMILES: CCC=COC
Molecular Weight: 86.13
CAS: 10034-13-6



Physical Properties

Property	Value	Unit	Source
$\Delta_f G°$	-33.56	kJ/mol	Joback Method
$\Delta_f H°_{gas}$	-161.53	kJ/mol	Joback Method
$\Delta_{fus} H°$	10.10	kJ/mol	Joback Method
$\Delta_{vap} H°$	29.09	kJ/mol	Joback Method
$logP_{oct/wat}$	1.56		Crippen Method
P_c	3615.89	kPa	Joback Method
T_{boil}	340.38	K	Joback Method
T_c	513.77	K	Joback Method
T_{fus}	163.26	K	Joback Method
V_c	0.31	m^3/kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	133.95	J/mol×K	340.38	Joback Method
η	0.00	Pa×s	340.38	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
NIST Webbook: http://webbook.nist.gov/cgi/inchi/InChI=1S/C5H10O/c1-3-4-5-6-2/h4-5H,3H2,1-2H3/b5-4+
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

$C_{p,gas}$: Ideal gas heat capacity (J/mol×K).
η: Dynamic viscosity (Pa×s).
Δ_f**G°**: Standard Gibbs free energy of formation (kJ/mol).
Δ_f**H°$_{gas}$**: Enthalpy of formation at standard conditions (kJ/mol).
Δ_{fus}**H°**: Enthalpy of fusion at standard conditions (kJ/mol).
Δ_{vap}**H°**: Enthalpy of vaporization at standard conditions (kJ/mol).
***log*P$_{oct/wat}$**: Octanol/Water partition coefficient .
P_c: Critical Pressure (kPa).
T_{boil}: Normal Boiling Point Temperature (K).
T_c: Critical Temperature (K).
T_{fus}: Normal melting (fusion) point (K).
V_c: Critical Volume (m^3/kg-mol).