1-Propene, 1-(dimethoxymethoxy)-

Other names: 1-Propene, 1-(dimethoxymethoxy)-, (E)-
Inchi: InChI=1S/C6H12O3/c1-4-5-9-6(7-2)8-3/h4-6H,1-3H3/b5-4-
InchiKey: DDINHWIZOMBDDD-PLNGDYQASA-N
Formula: C6H12O3
SMILES: C/C=C\OC(OC)OC
Mol. weight [g/mol]: 132.16
CAS: 66178-20-9

Physical Properties

Property code	Value	Unit	Source
hf	-510.15	kJ/mol	Cheméo Relay (1.0)
hfus	11.54	kJ/mol	Joback Method
hvap	43.05	kJ/mol	Cheméo Relay (1.0)
ie	9.02	eV	Cheméo Relay (1.0)
logp	1.113		Crippen Method
mcvol	108.710	ml/mol	McGowan Method
tb	389.14	K	Cheméo Relay (1.0)

Correlations

Information	Value
Property code	cpg
Equation	$Y = A + B \cdot T + C \cdot T^2 + D \cdot T^3 + E \cdot T.$
Y unit	J/mol×K
Coeff. A	5.80700e+01
Coeff. B	4.10160e-01
Coeff. C	-5.66000e-05
Coeff. D	-5.73000e-08
Coeff. E	0.00000e+00
Basis	predicted
Temperature range (K), min.	273.00
Temperature range (K), max.	1000.00

Information	Value
Property code	dvisc
Equation	Y = exp(A + B/T + C·ln(T) + D·T^E)
Y unit	Pa×s
Coeff. A	-1.19300e+01
Coeff. B	1.25573e+03
Coeff. C	0.00000e+00
Coeff. D	0.00000e+00
Coeff. E	0.00000e+00
Basis	predicted
Comment	Liquid phase. Joback/Reid (1987), valid from Tf to 0.7·Tc.
Temperature range (K), min.	203.99
Temperature range (K), max.	410.22

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C66178209&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
tb:	Normal Boiling Point Temperature

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