1-Propene, 1-(ethenyloxy)-, (Z)-

Inchi: InChI=1S/C5H8O/c1-3-5-6-4-2/h3-5H,2H2,1H3/b5-3-
InchiKey: YKLWPGCWVBBCTO-HYXAFXHYSA-N
Formula: C5H8O
SMILES: C=COC=CC
Mol. weight [g/mol]: 84.12
CAS: 24268-09-5

Physical Properties

Property code	Value	Unit	Source
gf	54.28	kJ/mol	Joback Method
hf	-36.10	kJ/mol	Joback Method
hfus	8.82	kJ/mol	Joback Method
hvap	28.42	kJ/mol	Joback Method
log10ws	-1.70		Crippen Method
logp	1.680		Crippen Method
mcvol	78.580	ml/mol	McGowan Method
pc	3805.69	kPa	Joback Method
tb	337.06	K	Joback Method
tc	514.18	K	Joback Method
tf	161.50	K	Joback Method
vc	0.294	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	121.28	J/mol×K	337.06	Joback Method
cpg	157.45	J/mol×K	484.66	Joback Method
cpg	150.81	J/mol×K	455.14	Joback Method
cpg	143.88	J/mol×K	425.62	Joback Method
cpg	136.65	J/mol×K	396.10	Joback Method
cpg	129.12	J/mol×K	366.58	Joback Method
cpg	163.82	J/mol×K	514.18	Joback Method
dvisc	0.0001627	Pa×s	337.06	Joback Method
dvisc	0.0002047	Pa×s	307.80	Joback Method

dvisc	0.0002703	Pa×s	278.54	Joback Method
dvisc	0.0003810	Pa×s	249.28	Joback Method
dvisc	0.0005883	Pa×s	220.02	Joback Method
dvisc	0.0010380	Pa×s	190.76	Joback Method
dvisc	0.0022496	Pa×s	161.50	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C24268095&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

https://www.chemeo.com/cid/51-123-8/1-Propene-1-ethenyloxy-Z.pdf

Generated by Cheméo on 2024-10-12 03:52:36.647998807 +0000 UTC m=+3286019.284968055.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.