10-Chlorodecyl (E)-2-methylbut-2-enoate

Inchi: InChI=1S/C15H27ClO2/c1-3-14(2)15(17)18-13-11-9-7-5-4-6-8-10-12-16/h3H,4-13H2,1-2
InchiKey: TUIDWTGLELZHGZ-LZWSPWQCSA-N
Formula: C15H27ClO2
SMILES: CC=C(C)C(=O)OCCCCCCCCCCCCl
Mol. weight [g/mol]: 274.83

Physical Properties

Property code	Value	Unit	Source
gf	-98.76	kJ/mol	Joback Method
hf	-506.04	kJ/mol	Joback Method
hfus	40.48	kJ/mol	Joback Method
hvap	62.56	kJ/mol	Joback Method
log10ws	-4.97		Crippen Method
logp	4.855		Crippen Method
mcvol	237.590	ml/mol	McGowan Method
pc	1488.44	kPa	Joback Method
rinpol	2018.00		NIST Webbook
tb	660.36	K	Joback Method
tc	840.11	K	Joback Method
tf	341.85	K	Joback Method
vc	0.929	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	633.30	J/mol×K	660.36	Joback Method
cpg	649.68	J/mol×K	690.32	Joback Method
cpg	665.28	J/mol×K	720.28	Joback Method
cpg	680.14	J/mol×K	750.23	Joback Method
cpg	694.26	J/mol×K	780.19	Joback Method
cpg	707.68	J/mol×K	810.15	Joback Method
cpg	720.43	J/mol×K	840.11	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U373744&Units=SI
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

Legend

cpg:	Ideal gas heat capacity
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume