Decan-2-yl (E)-2-methylbut-2-enoate

Inchi: InChI=1S/C15H28O2/c1-5-7-8-9-10-11-12-14(4)17-15(16)13(3)6-2/h6,14H,5,7-12H2,1-4H
InchiKey: DGENTGAGRCWMRF-AWNIVKPZSA-N
Formula: C15H28O2
SMILES: CC=C(C)C(=O)OC(C)CCCCCCCC
Mol. weight [g/mol]: 240.38

Physical Properties

Property code	Value	Unit	Source
gf	-89.27	kJ/mol	Joback Method
hf	-495.58	kJ/mol	Joback Method
hfus	32.76	kJ/mol	Joback Method
hvap	57.79	kJ/mol	Joback Method
log10ws	-4.93		Crippen Method
logp	4.635		Crippen Method
mcvol	225.350	ml/mol	McGowan Method
pc	1541.49	kPa	Joback Method
rinpol	1629.00		NIST Webbook
tb	622.49	K	Joback Method
tc	800.52	K	Joback Method
tf	296.93	K	Joback Method
vc	0.875	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	600.69	J/mol×K	622.49	Joback Method
cpg	618.22	J/mol×K	652.16	Joback Method
cpg	634.95	J/mol×K	681.83	Joback Method
cpg	650.90	J/mol×K	711.51	Joback Method
cpg	666.10	J/mol×K	741.18	Joback Method
cpg	680.57	J/mol×K	770.85	Joback Method
cpg	694.33	J/mol×K	800.52	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=U373747&Units=SI

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