

Z-8-Methyl-9-tetradecenoic acid

Inchi:	InChI=1S/C15H28O2/c1-3-4-5-8-11-14(2)12-9-6-7-10-13-15(16)17/h8,11,14H,3-7,9-10,1
InchiKey:	QCLNEWABNXOXBO-FLIBITNWSA-N
Formula:	C15H28O2
SMILES:	CCCCC=CC(C)CCCCCCC(=O)O
Mol. weight [g/mol]:	240.38

Physical Properties

Property code	Value	Unit	Source
gf	-112.54	kJ/mol	Joback Method
hf	-505.80	kJ/mol	Joback Method
hfus	36.97	kJ/mol	Joback Method
hvap	71.98	kJ/mol	Joback Method
log10ws	-4.81		Crippen Method
logp	4.794		Crippen Method
mcvol	225.350	ml/mol	McGowan Method
pc	1675.53	kPa	Joback Method
tb	692.37	K	Joback Method
tc	865.54	K	Joback Method
tf	349.48	K	Joback Method
vc	0.875	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	641.68	J/molxK	692.37	Joback Method
cpg	710.45	J/molxK	836.67	Joback Method
cpg	697.99	J/molxK	807.81	Joback Method
cpg	684.92	J/molxK	778.95	Joback Method
cpg	671.19	J/molxK	750.09	Joback Method
cpg	656.79	J/molxK	721.23	Joback Method
cpg	722.33	J/molxK	865.54	Joback Method
dvisc	0.0000335	Paxs	692.37	Joback Method
dvisc	0.0000541	Paxs	635.22	Joback Method
dvisc	0.0000963	Paxs	578.07	Joback Method

dvisc	0.0001945	Paxs	520.92	Joback Method
dvisc	0.0004671	Paxs	463.78	Joback Method
dvisc	0.0014345	Paxs	406.63	Joback Method
dvisc	0.0063588	Paxs	349.48	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U130845&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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

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