(E)-2-tetradecenal

Other names: 2-tetradecenal, E
Inchi: InChI=1S/C14H26O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15/h12-14H,2-11H2,1H3/b13-12
InchiKey: WHOZNOZYMBRCBL-OUKQBFOZSA-N
Formula: C14H26O
SMILES: CCCCCCCCCCCC=CC=O
Mol. weight [g/mol]: 210.36

Physical Properties

Property code	Value	Unit	Source
gf	47.70	kJ/mol	Joback Method
hf	-300.65	kJ/mol	Joback Method
hfus	34.51	kJ/mol	Joback Method
hvap	53.44	kJ/mol	Joback Method
log10ws	-4.82		Crippen Method
logp	4.662		Crippen Method
mcvol	205.390	ml/mol	McGowan Method
pc	1685.18	kPa	Joback Method
rinpol	1645.00		NIST Webbook
rinpol	1645.00		NIST Webbook
rinpol	1674.00		NIST Webbook
rinpol	1673.00		NIST Webbook
ripol	2059.00		NIST Webbook
ripol	2107.00		NIST Webbook
ripol	2098.00		NIST Webbook
ripol	2059.00		NIST Webbook
ripol	2078.00		NIST Webbook
ripol	2078.00		NIST Webbook
tb	572.54	K	Joback Method
tc	743.29	K	Joback Method
tf	284.46	K	Joback Method
vc	0.817	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	518.54	J/mol×K	572.54	Joback Method
cpg	593.97	J/mol×K	714.83	Joback Method
cpg	580.24	J/mol×K	686.37	Joback Method
cpg	565.86	J/mol×K	657.91	Joback Method
cpg	550.80	J/mol×K	629.46	Joback Method
cpg	535.03	J/mol×K	601.00	Joback Method
cpg	607.07	J/mol×K	743.29	Joback Method
dvisc	0.0001805	Pa×s	572.54	Joback Method
dvisc	0.0002406	Pa×s	524.53	Joback Method
dvisc	0.0003399	Pa×s	476.51	Joback Method
dvisc	0.0005187	Pa×s	428.50	Joback Method
dvisc	0.0008807	Pa×s	380.49	Joback Method
dvisc	0.0017423	Pa×s	332.47	Joback Method
dvisc	0.0043394	Pa×s	284.46	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=R222325&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
rinpol: Non-polar retention indices
ripol: Polar retention indices

tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume