(E)-2-pentadecenal

Inchi: InChI=1S/C15H28O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16/h13-15H,2-12H2,1H3/b14-
InchiKey: MLTULPRRIKTZBN-BUHFOSPRSA-N
Formula: C15H28O
SMILES: CCCCCCCCCCCCC=CC=O
Mol. weight [g/mol]: 224.38

Physical Properties

Property code	Value	Unit	Source
gf	56.12	kJ/mol	Joback Method
hf	-321.29	kJ/mol	Joback Method
hfus	37.10	kJ/mol	Joback Method
hvap	55.66	kJ/mol	Joback Method
log10ws	-5.24		Crippen Method
logp	5.053		Crippen Method
mcvol	219.480	ml/mol	McGowan Method
pc	1559.81	kPa	Joback Method
rinpol	1751.00		NIST Webbook
rinpol	1750.00		NIST Webbook
tb	595.42	K	Joback Method
tc	765.25	K	Joback Method
tf	295.73	K	Joback Method
vc	0.873	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	570.74	J/mol×K	595.42	Joback Method
cpg	648.52	J/mol×K	736.94	Joback Method
cpg	634.36	J/mol×K	708.64	Joback Method
cpg	619.53	J/mol×K	680.33	Joback Method
cpg	604.00	J/mol×K	652.03	Joback Method
cpg	587.75	J/mol×K	623.72	Joback Method
cpg	662.05	J/mol×K	765.25	Joback Method
dvisc	0.0001639	Pa×s	595.42	Joback Method

dvisc	0.0002192	Pa×s	545.47	Joback Method
dvisc	0.0003109	Pa×s	495.52	Joback Method
dvisc	0.0004770	Pa×s	445.58	Joback Method
dvisc	0.0008152	Pa×s	395.63	Joback Method
dvisc	0.0016268	Pa×s	345.68	Joback Method
dvisc	0.0040996	Pa×s	295.73	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=R222345&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume