3-Ethyl-3-methylpentadecane

Inchi: InChI=1S/C18H38/c1-5-8-9-10-11-12-13-14-15-16-17-18(4,6-2)7-3/h5-17H2,1-4H3
InchiKey: YQAFHEZOUXYJJH-UHFFFAOYSA-N
Formula: C18H38
SMILES: CCCCCCCCCCCCC(C)(CC)CC
Mol. weight [g/mol]: 254.49

Physical Properties

Property code	Value	Unit	Source
gf	103.52	kJ/mol	Joback Method
hf	-423.60	kJ/mol	Joback Method
hfus	34.96	kJ/mol	Joback Method
hvap	54.37	kJ/mol	Joback Method
log10ws	-7.12		Crippen Method
logp	7.124		Crippen Method
mcvol	264.480	ml/mol	McGowan Method
pc	1167.22	kPa	Joback Method
rinpol	1752.00		NIST Webbook
rinpol	1752.00		NIST Webbook
tb	608.01	K	Joback Method
tc	772.93	K	Joback Method
tf	295.04	K	Joback Method
vc	1.032	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	725.69	J/mol×K	608.01	Joback Method
cpg	746.49	J/mol×K	635.50	Joback Method
cpg	766.38	J/mol×K	662.98	Joback Method
cpg	785.40	J/mol×K	690.47	Joback Method
cpg	803.57	J/mol×K	717.95	Joback Method
cpg	820.93	J/mol×K	745.44	Joback Method
cpg	837.52	J/mol×K	772.93	Joback Method
dvisc	0.0054801	Pa×s	295.04	Joback Method

dvisc	0.0017463	Pa×s	347.20	Joback Method
dvisc	0.0007503	Pa×s	399.36	Joback Method
dvisc	0.0003918	Pa×s	451.52	Joback Method
dvisc	0.0002341	Pa×s	503.69	Joback Method
dvisc	0.0001540	Pa×s	555.85	Joback Method
dvisc	0.0001089	Pa×s	608.01	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=R415359&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