3-Ethyl-3-methylnonadecane

Inchi: InChI=1S/C22H46/c1-5-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22(4,6-2)7-3/h5-21H2
InchiKey: FGHGGVDAVODSPZ-UHFFFAOYSA-N
Formula: C22H46
SMILES: CCCCCCCCCCCCCCCCC(C)(CC)CC
Mol. weight [g/mol]: 310.60

Physical Properties

Property code	Value	Unit	Source
gf	137.20	kJ/mol	Joback Method
hf	-506.16	kJ/mol	Joback Method
hfus	45.32	kJ/mol	Joback Method
hvap	63.27	kJ/mol	Joback Method
log10ws	-8.79		Crippen Method
logp	8.684		Crippen Method
mcvol	320.840	ml/mol	McGowan Method
pc	912.18	kPa	Joback Method
rinpol	2158.00		NIST Webbook
rinpol	2158.00		NIST Webbook
tb	699.53	K	Joback Method
tc	866.63	K	Joback Method
tf	340.12	K	Joback Method
vc	1.256	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	963.48	J/mol×K	699.53	Joback Method
cpg	985.57	J/mol×K	727.38	Joback Method
cpg	1006.67	J/mol×K	755.23	Joback Method
cpg	1026.82	J/mol×K	783.08	Joback Method
cpg	1046.05	J/mol×K	810.93	Joback Method
cpg	1064.42	J/mol×K	838.78	Joback Method
cpg	1081.96	J/mol×K	866.63	Joback Method
dvisc	0.0033295	Pa×s	340.12	Joback Method

dvisc	0.0010494	Pa×s	400.02	Joback Method
dvisc	0.0004468	Pa×s	459.92	Joback Method
dvisc	0.0002316	Pa×s	519.83	Joback Method
dvisc	0.0001375	Pa×s	579.73	Joback Method
dvisc	0.0000900	Pa×s	639.63	Joback Method
dvisc	0.0000634	Pa×s	699.53	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=U360426&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