3,3-Diethylpentadecane

Inchi: InChI=1S/C19H40/c1-5-9-10-11-12-13-14-15-16-17-18-19(6-2,7-3)8-4/h5-18H2,1-4H3
InchiKey: FUFJQEHAKXDXFH-UHFFFAOYSA-N
Formula: C19H40
SMILES: CCCCCCCCCCCCC(CC)(CC)CC
Mol. weight [g/mol]: 268.52

Physical Properties

Property code	Value	Unit	Source
gf	111.94	kJ/mol	Joback Method
hf	-444.24	kJ/mol	Joback Method
hfus	37.55	kJ/mol	Joback Method
hvap	56.59	kJ/mol	Joback Method
log10ws	-7.53		Crippen Method
logp	7.514		Crippen Method
mcvol	278.570	ml/mol	McGowan Method
pc	1094.27	kPa	Joback Method
rinpol	1857.00		NIST Webbook
rinpol	1857.00		NIST Webbook
tb	630.89	K	Joback Method
tc	795.73	K	Joback Method
tf	306.31	K	Joback Method
vc	1.089	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	783.43	J/mol×K	630.89	Joback Method
cpg	804.55	J/mol×K	658.36	Joback Method
cpg	824.75	J/mol×K	685.84	Joback Method
cpg	844.05	J/mol×K	713.31	Joback Method
cpg	862.50	J/mol×K	740.78	Joback Method
cpg	880.12	J/mol×K	768.26	Joback Method
cpg	896.96	J/mol×K	795.73	Joback Method
dvisc	0.0048700	Pa×s	306.31	Joback Method

dvisc	0.0015472	Pa×s	360.41	Joback Method
dvisc	0.0006630	Pa×s	414.50	Joback Method
dvisc	0.0003455	Pa×s	468.60	Joback Method
dvisc	0.0002061	Pa×s	522.70	Joback Method
dvisc	0.0001354	Pa×s	576.79	Joback Method
dvisc	0.0000956	Pa×s	630.89	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=U360411&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