6,6-Diethyltetradecane

Inchi: InChI=1S/C18H38/c1-5-9-11-12-13-15-17-18(7-3,8-4)16-14-10-6-2/h5-17H2,1-4H3
InchiKey: ALUMZEPSUCJPOH-UHFFFAOYSA-N
Formula: C18H38
SMILES: CCCCCCCCC(CC)(CC)CCCCC
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	1695.00		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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R415819&Units=SI

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

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