5,5,13,13-Tetraethylheptadecane

Inchi: InChI=1S/C25H52/c1-7-13-20-24(9-3,10-4)22-18-16-15-17-19-23-25(11-5,12-6)21-14-8-2
InchiKey: ZJANNPIATDOOLP-UHFFFAOYSA-N
Formula: C25H52
SMILES: CCCCC(CC)(CC)CCCCCCCC(CC)(CC)CCCC
Mol. weight [g/mol]: 352.68

Physical Properties

Property code	Value	Unit	Source
gf	165.30	kJ/mol	Joback Method
hf	-576.83	kJ/mol	Joback Method
hfus	45.68	kJ/mol	Joback Method
hvap	68.65	kJ/mol	Joback Method
log10ws	-9.80		Crippen Method
logp	9.710		Crippen Method
mcvol	363.110	ml/mol	McGowan Method
pc	780.25	kPa	Joback Method
rinpol	2330.00		NIST Webbook
rinpol	2330.00		NIST Webbook
tb	764.94	K	Joback Method
tc	941.10	K	Joback Method
tf	376.35	K	Joback Method
vc	1.413	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1153.01	J/mol×K	764.94	Joback Method
cpg	1176.37	J/mol×K	794.30	Joback Method
cpg	1198.60	J/mol×K	823.66	Joback Method
cpg	1219.77	J/mol×K	853.02	Joback Method
cpg	1239.94	J/mol×K	882.38	Joback Method
cpg	1259.18	J/mol×K	911.74	Joback Method
cpg	1277.54	J/mol×K	941.10	Joback Method
dvisc	0.0023310	Pa×s	376.35	Joback Method

dvisc	0.0006833	Pa×s	441.12	Joback Method
dvisc	0.0002742	Pa×s	505.88	Joback Method
dvisc	0.0001354	Pa×s	570.64	Joback Method
dvisc	0.0000772	Pa×s	635.41	Joback Method
dvisc	0.0000488	Pa×s	700.17	Joback Method
dvisc	0.0000334	Pa×s	764.94	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R415433&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

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