7,7-Diethyltridecane

Inchi: InChI=1S/C17H36/c1-5-9-11-13-15-17(7-3,8-4)16-14-12-10-6-2/h5-16H2,1-4H3
InchiKey: FDAPNWKEDLHKKM-UHFFFAOYSA-N
Formula: C17H36
SMILES: CCCCCCC(CC)(CC)CCCCCC
Mol. weight [g/mol]: 240.47

Physical Properties

Property code	Value	Unit	Source
gf	95.10	kJ/mol	Joback Method
hf	-402.96	kJ/mol	Joback Method
hfus	32.37	kJ/mol	Joback Method
hvap	52.14	kJ/mol	Joback Method
log10ws	-6.70		Crippen Method
logp	6.734		Crippen Method
mcvol	250.390	ml/mol	McGowan Method
pc	1247.73	kPa	Joback Method
rinpol	1593.00		NIST Webbook
tb	585.13	K	Joback Method
tc	750.44	K	Joback Method
tf	283.77	K	Joback Method
vc	0.977	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	669.21	J/mol×K	585.13	Joback Method
cpg	689.68	J/mol×K	612.68	Joback Method
cpg	709.25	J/mol×K	640.23	Joback Method
cpg	727.95	J/mol×K	667.79	Joback Method
cpg	745.83	J/mol×K	695.34	Joback Method
cpg	762.91	J/mol×K	722.89	Joback Method
cpg	779.23	J/mol×K	750.44	Joback Method
dvisc	0.0061345	Pa×s	283.77	Joback Method
dvisc	0.0019614	Pa×s	334.00	Joback Method

dvisc	0.0008449	Pa×s	384.22	Joback Method
dvisc	0.0004422	Pa×s	434.45	Joback Method
dvisc	0.0002647	Pa×s	484.68	Joback Method
dvisc	0.0001745	Pa×s	534.90	Joback Method
dvisc	0.0001235	Pa×s	585.13	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R415864&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

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