9-Decenylcyclopentane

Inchi: InChI=1S/C15H28/c1-2-3-4-5-6-7-8-9-12-15-13-10-11-14-15/h2,15H,1,3-14H2
InchiKey: HSGXSXQEZDGBHC-UHFFFAOYSA-N
Formula: C15H28
SMILES: C=CCCCCCCCCC1CCCC1
Mol. weight [g/mol]: 208.38

Physical Properties

Property code	Value	Unit	Source
gf	199.81	kJ/mol	Joback Method
hf	-167.02	kJ/mol	Joback Method
hfus	27.26	kJ/mol	Joback Method
hvap	48.57	kJ/mol	Joback Method
log10ws	-5.61		Crippen Method
logp	5.483		Crippen Method
mcvol	207.050	ml/mol	McGowan Method
pc	1685.18	kPa	Joback Method
rinpol	1524.90		NIST Webbook
tb	554.56	K	Joback Method
tc	737.61	K	Joback Method
tf	267.95	K	Joback Method
vc	0.797	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	528.46	J/mol×K	554.56	Joback Method
cpg	623.09	J/mol×K	707.10	Joback Method
cpg	606.06	J/mol×K	676.59	Joback Method
cpg	588.11	J/mol×K	646.09	Joback Method
cpg	569.23	J/mol×K	615.58	Joback Method
cpg	549.35	J/mol×K	585.07	Joback Method
cpg	639.26	J/mol×K	737.61	Joback Method
dvisc	0.0002369	Pa×s	554.56	Joback Method
dvisc	0.0003092	Pa×s	506.79	Joback Method

dvisc	0.0004267	Pa×s	459.02	Joback Method
dvisc	0.0006346	Pa×s	411.25	Joback Method
dvisc	0.0010476	Pa×s	363.49	Joback Method
dvisc	0.0020126	Pa×s	315.72	Joback Method
dvisc	0.0048801	Pa×s	267.95	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R388900&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