Cyclopentane, 4-methylpentyl

Inchi: InChI=1S/C11H22/c1-10(2)6-5-9-11-7-3-4-8-11/h10-11H,3-9H2,1-2H3
InchiKey: PDKAJPYRQGPDLU-UHFFFAOYSA-N
Formula: C11H22
SMILES: CC(C)CCCC1CCCC1
Mol. weight [g/mol]: 154.29

Physical Properties

Property code	Value	Unit	Source
gf	75.85	kJ/mol	Joback Method
hf	-215.17	kJ/mol	Joback Method
hfus	14.66	kJ/mol	Joback Method
hvap	39.95	kJ/mol	Joback Method
log10ws	-3.84		Crippen Method
logp	4.003		Crippen Method
mcvol	154.990	ml/mol	McGowan Method
pc	2298.11	kPa	Joback Method
rinpol	1104.00		NIST Webbook
rinpol	1095.00		NIST Webbook
rinpol	1100.00		NIST Webbook
tb	465.92	K	Joback Method
tc	657.55	K	Joback Method
tf	209.63	K	Joback Method
vc	0.587	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	346.47	J/mol×K	465.92	Joback Method
cpg	366.19	J/mol×K	497.86	Joback Method
cpg	384.96	J/mol×K	529.80	Joback Method
cpg	402.80	J/mol×K	561.74	Joback Method
cpg	419.74	J/mol×K	593.68	Joback Method
cpg	435.83	J/mol×K	625.62	Joback Method
cpg	451.08	J/mol×K	657.55	Joback Method

dvisc	0.0084385	Pa×s	209.63	Joback Method
dvisc	0.0029659	Pa×s	252.34	Joback Method
dvisc	0.0014110	Pa×s	295.06	Joback Method
dvisc	0.0008100	Pa×s	337.77	Joback Method
dvisc	0.0005267	Pa×s	380.49	Joback Method
dvisc	0.0003736	Pa×s	423.21	Joback Method
dvisc	0.0002822	Pa×s	465.92	Joback Method

Sources

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=R10735&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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