Cyclopentane, nonadecyl

Other names: n-Nonadecyl-cyclopentane
Inchi: InChI=1S/C24H48/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-21-24-22-19-20-23-24
InchiKey: DNSPFUFOXYIYCY-UHFFFAOYSA-N
Formula: C24H48
SMILES: CCCCCCCCCCCCCCCCCCCC1CCCC1
Mol. weight [g/mol]: 336.64

Physical Properties

Property code	Value	Unit	Source
gf	187.75	kJ/mol	Joback Method
hf	-478.21	kJ/mol	Joback Method
hfus	51.85	kJ/mol	Joback Method
hvap	69.27	kJ/mol	Joback Method
log10ws	-9.52		Crippen Method
logp	9.218		Crippen Method
mcvol	338.160	ml/mol	McGowan Method
pc	895.34	kPa	Joback Method
rinpol	2486.00		NIST Webbook
rinpol	2478.00		NIST Webbook
rinpol	2489.00		NIST Webbook
tb	763.80	K	Joback Method
tc	941.77	K	Joback Method
tf	371.14	K	Joback Method
vc	1.321	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1083.32	J/mol×K	763.80	Joback Method
cpg	1189.62	J/mol×K	912.10	Joback Method
cpg	1170.50	J/mol×K	882.44	Joback Method
cpg	1150.35	J/mol×K	852.78	Joback Method
cpg	1129.14	J/mol×K	823.12	Joback Method
cpg	1106.81	J/mol×K	793.46	Joback Method

cpg	1207.78	J/mol×K	941.77	Joback Method
dvisc	0.0000847	Pa×s	763.80	Joback Method
dvisc	0.0001148	Pa×s	698.36	Joback Method
dvisc	0.0001658	Pa×s	632.91	Joback Method
dvisc	0.0002606	Pa×s	567.47	Joback Method
dvisc	0.0004608	Pa×s	502.03	Joback Method
dvisc	0.0009665	Pa×s	436.58	Joback Method
dvisc	0.0026329	Pa×s	371.14	Joback Method

Sources

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=R248545&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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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