7-Cyclohexylnonadecane

Inchi: InChI=1S/C25H50/c1-3-5-7-9-10-11-12-13-14-17-21-24(20-16-8-6-4-2)25-22-18-15-19-23
InchiKey: AQQBKKMWNJHQPX-UHFFFAOYSA-N
Formula: C25H50
SMILES: CCCCCCCCCCCCC(CCCCCC)C1CCCCC1
Mol. weight [g/mol]: 350.66

Physical Properties

Property code	Value	Unit	Source
gf	181.63	kJ/mol	Joback Method
hf	-510.29	kJ/mol	Joback Method
hfus	48.82	kJ/mol	Joback Method
hvap	71.28	kJ/mol	Joback Method
log10ws	-9.70		Crippen Method
logp	9.464		Crippen Method
mcvol	352.250	ml/mol	McGowan Method
pc	862.51	kPa	Joback Method
rinpol	2443.00		NIST Webbook
ripol	2502.12		NIST Webbook
tb	790.51	K	Joback Method
tc	974.21	K	Joback Method
tf	363.89	K	Joback Method
vc	1.363	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1152.87	J/mol×K	790.51	Joback Method
cpg	1261.82	J/mol×K	943.60	Joback Method
cpg	1242.42	J/mol×K	912.98	Joback Method
cpg	1221.88	J/mol×K	882.36	Joback Method
cpg	1200.14	J/mol×K	851.74	Joback Method
cpg	1177.15	J/mol×K	821.13	Joback Method
cpg	1280.12	J/mol×K	974.21	Joback Method
dvisc	0.0000482	Pa×s	790.51	Joback Method

dvisc	0.0000686	Pa×s	719.41	Joback Method
dvisc	0.0001056	Pa×s	648.30	Joback Method
dvisc	0.0001806	Pa×s	577.20	Joback Method
dvisc	0.0003594	Pa×s	506.10	Joback Method
dvisc	0.0008954	Pa×s	434.99	Joback Method
dvisc	0.0031872	Pa×s	363.89	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=U357254&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume