

5-cyclohexylnonadecane

Inchi:	InChI=1S/C25H50/c1-3-5-7-8-9-10-11-12-13-14-15-17-21-24(20-6-4-2)25-22-18-16-19-23
InchiKey:	ZMBDNBVKSDRYDB-UHFFFAOYSA-N
Formula:	C25H50
SMILES:	CCCCCCCCCCCCCCC(CCCC)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
mvol	352.250	ml/mol	McGowan Method
pc	862.51	kPa	Joback Method
ripol	2462.32		NIST Webbook
ripol	2525.67		NIST Webbook
tb	790.51	K	Joback Method
tc	974.21	K	Joback Method
tf	363.89	K	Joback Method
vc	1.363	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1152.87	J/molxK	790.51	Joback Method
cpg	1177.15	J/molxK	821.13	Joback Method
cpg	1200.14	J/molxK	851.74	Joback Method
cpg	1221.88	J/molxK	882.36	Joback Method
cpg	1242.42	J/molxK	912.98	Joback Method
cpg	1261.82	J/molxK	943.60	Joback Method
cpg	1280.12	J/molxK	974.21	Joback Method
dvisc	0.0031872	Paxs	363.89	Joback Method

dvisc	0.0008954	Paxs	434.99	Joback Method
dvisc	0.0003594	Paxs	506.10	Joback Method
dvisc	0.0001806	Paxs	577.20	Joback Method
dvisc	0.0001056	Paxs	648.30	Joback Method
dvisc	0.0000686	Paxs	719.41	Joback Method
dvisc	0.0000482	Paxs	790.51	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R228521&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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