

Cyclopentane, 2-n-octyl-

Inchi:	InChI=1S/C13H24/c1-2-3-4-5-6-7-10-13-11-8-9-12-13/h8,11,13H,2-7,9-10,12H2,1H3
InchiKey:	SYEHHBWQHNEFBN-UHFFFAOYSA-N
Formula:	C13H24
SMILES:	CCCCCCCCC1C=CCC1
Mol. weight [g/mol]:	180.33
CAS:	66324-48-9

Physical Properties

Property code	Value	Unit	Source
gf	125.09	kJ/mol	Joback Method
hf	-193.39	kJ/mol	Joback Method
hfus	24.58	kJ/mol	Joback Method
hvap	45.08	kJ/mol	Joback Method
log10ws	-4.77		Crippen Method
logp	4.703		Crippen Method
mvol	178.870	ml/mol	McGowan Method
pc	1975.31	kPa	Joback Method
rinpol	1309.00		NIST Webbook
tb	511.28	K	Joback Method
tc	696.42	K	Joback Method
tf	247.93	K	Joback Method
vc	0.691	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	426.85	J/molxK	511.28	Joback Method
cpg	446.28	J/molxK	542.14	Joback Method
cpg	464.77	J/molxK	572.99	Joback Method
cpg	482.35	J/molxK	603.85	Joback Method
cpg	499.06	J/molxK	634.71	Joback Method
cpg	514.93	J/molxK	665.57	Joback Method
cpg	529.99	J/molxK	696.42	Joback Method
dvisc	0.0044074	Paxs	247.93	Joback Method

dvisc	0.0019436	Paxs	291.82	Joback Method
dvisc	0.0010617	Paxs	335.71	Joback Method
dvisc	0.0006670	Paxs	379.61	Joback Method
dvisc	0.0004614	Paxs	423.50	Joback Method
dvisc	0.0003421	Paxs	467.39	Joback Method
dvisc	0.0002670	Paxs	511.28	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C66324489&Units=SI

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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