

Cyclopentane, 2-methylpentyl

Inchi: InChI=1S/C11H22/c1-3-6-10(2)9-11-7-4-5-8-11/h10-11H,3-9H2,1-2H3
InchiKey: MICSMHRSXFNCJJ-UHFFFAOYSA-N
Formula: C11H22
SMILES: CCCC(C)CC1CCCC1
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	1091.00		NIST Webbook
rinpol	1095.00		NIST Webbook
rinpol	1086.00		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/molxK	465.92	Joback Method
cpg	366.19	J/molxK	497.86	Joback Method
cpg	384.96	J/molxK	529.80	Joback Method
cpg	402.80	J/molxK	561.74	Joback Method
cpg	419.74	J/molxK	593.68	Joback Method
cpg	435.83	J/molxK	625.62	Joback Method
cpg	451.08	J/molxK	657.55	Joback Method

dvisc	0.0084385	Paxs	209.63	Joback Method
dvisc	0.0029659	Paxs	252.34	Joback Method
dvisc	0.0014110	Paxs	295.06	Joback Method
dvisc	0.0008100	Paxs	337.77	Joback Method
dvisc	0.0005267	Paxs	380.49	Joback Method
dvisc	0.0003736	Paxs	423.21	Joback Method
dvisc	0.0002822	Paxs	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=R10717&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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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