

Cyclopentane, 1-methyl-2-pentyl, cis

Other names:	cis-1-Methyl-2-pentylcyclopentane
Inchi:	InChI=1S/C11H22/c1-3-4-5-8-11-9-6-7-10(11)2/h10-11H,3-9H2,1-2H3/t10-,11+/m0/s1
InchiKey:	WBIQVPXLBVMXEA-WDEREUQCSA-N
Formula:	C11H22
SMILES:	CCCCC1CCCC1C
Mol. weight [g/mol]:	154.29

Physical Properties

Property code	Value	Unit	Source
gf	70.58	kJ/mol	Joback Method
hf	-230.23	kJ/mol	Joback Method
hfus	19.25	kJ/mol	Joback Method
hvap	40.03	kJ/mol	Joback Method
log10ws	-3.84		Crippen Method
logp	4.003		Crippen Method
mcvol	154.990	ml/mol	McGowan Method
pc	2210.37	kPa	Joback Method
rinpol	1111.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1116.00		NIST Webbook
rinpol	1120.00		NIST Webbook
rinpol	1116.00		NIST Webbook
rinpol	1120.00		NIST Webbook
tb	461.69	K	Joback Method
tc	648.77	K	Joback Method
tf	220.39	K	Joback Method
vc	0.592	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	346.22	J/mol×K	461.69	Joback Method
cpg	365.75	J/mol×K	492.87	Joback Method
cpg	384.40	J/mol×K	524.05	Joback Method

cpg	402.19	J/molxK	555.23	Joback Method
cpg	419.15	J/molxK	586.41	Joback Method
cpg	435.30	J/molxK	617.59	Joback Method
cpg	450.67	J/molxK	648.77	Joback Method
dvisc	0.0033159	Paxs	220.39	Joback Method
dvisc	0.0016355	Paxs	260.61	Joback Method
dvisc	0.0009745	Paxs	300.82	Joback Method
dvisc	0.0006560	Paxs	341.04	Joback Method
dvisc	0.0004801	Paxs	381.26	Joback Method
dvisc	0.0003729	Paxs	421.47	Joback Method
dvisc	0.0003027	Paxs	461.69	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=R10646&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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