Cyclohexane, 1-methyl-2-pentyl-

Inchi: InChI=1S/C12H24/c1-3-4-5-9-12-10-7-6-8-11(12)2/h11-12H,3-10H2,1-2H3
InchiKey: NBAUUOZAFSUJPB-UHFFFAOYSA-N
Formula: C12H24
SMILES: CCCCCC1CCCCC1C
Mol. weight [g/mol]: 168.32
CAS: 54411-01-7

Physical Properties

Property code	Value	Unit	Source
gf	66.90	kJ/mol	Joback Method
hf	-257.03	kJ/mol	Joback Method
hfus	19.74	kJ/mol	Joback Method
hvap	42.43	kJ/mol	Joback Method
log10ws	-4.26		Crippen Method
logp	4.393		Crippen Method
mcvol	169.080	ml/mol	McGowan Method
pc	2069.88	kPa	Joback Method
tb	490.60 ± 4.00	K	NIST Webbook
tb	490.40 ± 4.00	K	NIST Webbook
tc	680.82	K	Joback Method
tf	228.14	K	Joback Method
vc	0.639	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	394.98	J/mol×K	488.84	Joback Method
cpg	416.25	J/mol×K	520.84	Joback Method
cpg	436.55	J/mol×K	552.83	Joback Method
cpg	455.89	J/mol×K	584.83	Joback Method
cpg	474.29	J/mol×K	616.82	Joback Method
cpg	491.79	J/mol×K	648.82	Joback Method
cpg	508.39	J/mol×K	680.82	Joback Method
dvisc	0.0053664	Pa×s	228.14	Joback Method

dvisc	0.0021311	Pa×s	271.59	Joback Method
dvisc	0.0010919	Pa×s	315.04	Joback Method
dvisc	0.0006578	Pa×s	358.49	Joback Method
dvisc	0.0004422	Pa×s	401.94	Joback Method
dvisc	0.0003213	Pa×s	445.39	Joback Method
dvisc	0.0002470	Pa×s	488.84	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=C54411017&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume