Cyclohexane, (cyclopentylmethyl)-

Other names:	Methane, cyclohexylcyclopentyl-
	Cyclopentylcyclohexylmethane
	cyclohexylcyclopentylmethane
Inchi:	InChI=1S/C12H22/c1-2-6-11(7-3-1)10-12-8-4-5-9-12/h11-12H,1-10H2
InchiKey:	YIYWTNBPUYHPLR-UHFFFAOYSA-N
Formula:	C12H22
SMILES:	C1CCC(CC2CCCC2)CC1
Mol. weight [g/mol]:	166.30
CAS:	4431-89-4

Physical Properties

Property code	Value	Unit	Source
gf	111.16	kJ/mol	Joback Method
hf	-176.21	kJ/mol	Joback Method
hfus	12.61	kJ/mol	Joback Method
hvap	42.99	kJ/mol	Joback Method
log10ws	-4.15		Crippen Method
logp	4.147		Crippen Method
mcvol	158.220	ml/mol	McGowan Method
pc	2537.93	kPa	Joback Method
tb	508.79	K	Joback Method
tc	732.21	K	Joback Method
tf	243.28	K	Joback Method
vc	0.582	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	384.00	J/mol×K	508.79	Joback Method
cpg	493.39	J/mol×K	694.98	Joback Method
cpg	474.29	J/mol×K	657.74	Joback Method
cpg	453.86	J/mol×K	620.50	Joback Method
cpg	432.04	J/mol×K	583.26	Joback Method
cpg	408.77	J/mol×K	546.03	Joback Method

cpg	511.21	J/mol×K	732.21	Joback Method
dvisc	0.0003137	Pa×s	508.79	Joback Method
dvisc	0.0004135	Pa×s	464.54	Joback Method
dvisc	0.0005777	Pa×s	420.29	Joback Method
dvisc	0.0008733	Pa×s	376.03	Joback Method
dvisc	0.0014738	Pa×s	331.78	Joback Method
dvisc	0.0029221	Pa×s	287.53	Joback Method
dvisc	0.0074317	Pa×s	243.28	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4431894&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume