

4-Methylcycloheptene

Other names:	Cycloheptene, 4-methyl
Inchi:	InChI=1S/C8H14/c1-8-6-4-2-3-5-7-8/h2,4,8H,3,5-7H2,1H3
InchiKey:	HSIILYALDVTOTE-UHFFFAOYSA-N
Formula:	C8H14
SMILES:	CC1CC=CCCC1
Mol. weight [g/mol]:	110.20

Physical Properties

Property code	Value	Unit	Source
gf	58.79	kJ/mol	Joback Method
hf	-102.51	kJ/mol	Joback Method
hfus	7.43	kJ/mol	Joback Method
hvap	34.30	kJ/mol	Joback Method
log10ws	-2.68		Crippen Method
logp	2.753		Crippen Method
mvol	108.420	ml/mol	McGowan Method
pc	3380.21	kPa	Joback Method
rinpol	749.00		NIST Webbook
rinpol	849.00		NIST Webbook
tb	405.42	K	Joback Method
tc	617.11	K	Joback Method
tf	184.54	K	Joback Method
vc	0.395	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	198.55	J/mol×K	405.42	Joback Method
cpg	215.85	J/mol×K	440.70	Joback Method
cpg	232.29	J/mol×K	475.98	Joback Method
cpg	247.89	J/mol×K	511.26	Joback Method
cpg	262.67	J/mol×K	546.55	Joback Method
cpg	276.65	J/mol×K	581.83	Joback Method
cpg	289.85	J/mol×K	617.11	Joback Method

dvisc	0.0112340	Paxs	184.54	Joback Method
dvisc	0.0034636	Paxs	221.35	Joback Method
dvisc	0.0014937	Paxs	258.17	Joback Method
dvisc	0.0007946	Paxs	294.98	Joback Method
dvisc	0.0004863	Paxs	331.79	Joback Method
dvisc	0.0003283	Paxs	368.61	Joback Method
dvisc	0.0002380	Paxs	405.42	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R133012&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

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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