Cycloheptene, 5-methyl-

Other names: 5-Methylcycloheptene
Inchi: InChI=1S/C8H14/c1-8-6-4-2-3-5-7-8/h2-3,8H,4-7H2,1H3
InchiKey: ASLRNQBBLPDZET-UHFFFAOYSA-N
Formula: C8H14
SMILES: CC1CCC=CCC1
Mol. weight [g/mol]: 110.20
CAS: 2505-06-8

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
mcvol	108.420	ml/mol	McGowan Method
pc	3380.21	kPa	Joback Method
rinpol	851.00		NIST Webbook
rinpol	851.00		NIST Webbook
tb	405.42	K	Joback Method
tc	617.11	K	Joback Method
tf	184.54	K	Joback Method
vc	0.395	m3/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	Pa×s	184.54	Joback Method
dvisc	0.0034636	Pa×s	221.35	Joback Method
dvisc	0.0014937	Pa×s	258.17	Joback Method
dvisc	0.0007946	Pa×s	294.98	Joback Method
dvisc	0.0004863	Pa×s	331.79	Joback Method
dvisc	0.0003283	Pa×s	368.61	Joback Method
dvisc	0.0002380	Pa×s	405.42	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=C2505068&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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