Cycloheptane, 1-isopropyl-

Inchi: InChI=1S/C10H18/c1-9(2)10-7-5-3-4-6-8-10/h7,9H,3-6,8H2,1-2H3
InchiKey: KTLJXRGLODFJIG-UHFFFAOYSA-N
Formula: C10H18
SMILES: CC(C)C1=CCCCCC1
Mol. weight [g/mol]: 138.25
CAS: 17257-36-2

Physical Properties

Property code	Value	Unit	Source
gf	71.27	kJ/mol	Joback Method
hf	-140.20	kJ/mol	Joback Method
hfus	7.63	kJ/mol	Joback Method
hvap	39.33	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.533		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2811.36	kPa	Joback Method
tb	460.39	K	Joback Method
tc	673.79	K	Joback Method
tf	208.84	K	Joback Method
vc	0.501	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.32	J/mol×K	460.39	Joback Method
cpg	305.44	J/mol×K	495.96	Joback Method
cpg	323.57	J/mol×K	531.52	Joback Method
cpg	340.73	J/mol×K	567.09	Joback Method
cpg	356.95	J/mol×K	602.65	Joback Method
cpg	372.25	J/mol×K	638.22	Joback Method
cpg	386.66	J/mol×K	673.79	Joback Method
dvisc	0.0177954	Pa×s	208.84	Joback Method
dvisc	0.0044613	Pa×s	250.76	Joback Method

dvisc	0.0016624	Pa×s	292.69	Joback Method
dvisc	0.0007933	Pa×s	334.62	Joback Method
dvisc	0.0004464	Pa×s	376.54	Joback Method
dvisc	0.0002819	Pa×s	418.47	Joback Method
dvisc	0.0001935	Pa×s	460.39	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C17257362&Units=SI

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