Cyclohexene, 4-(1-methylethyl)

Other names: 4-isopropylcyclohexene
Inchi: InChI=1S/C9H16/c1-8(2)9-6-4-3-5-7-9/h3-4,8-9H,5-7H2,1-2H3
InchiKey: DUFSFEODQNDOBE-UHFFFAOYSA-N
Formula: C9H16
SMILES: CC(C)C1CC=CCC1
Mol. weight [g/mol]: 124.22

Physical Properties

Property code	Value	Unit	Source
gf	76.87	kJ/mol	Joback Method
hf	-122.27	kJ/mol	Joback Method
hfus	8.60	kJ/mol	Joback Method
hvap	35.96	kJ/mol	Joback Method
log10ws	-2.85		Crippen Method
logp	2.999		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2976.29	kPa	Joback Method
rinpol	933.90		NIST Webbook
rinpol	929.50		NIST Webbook
rinpol	929.50		NIST Webbook
ripol	1066.00		NIST Webbook
tb	423.59	K	Joback Method
tc	629.46	K	Joback Method
tf	184.33	K	Joback Method
vc	0.453	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	241.39	J/mol×K	423.59	Joback Method
cpg	321.90	J/mol×K	595.15	Joback Method
cpg	307.52	J/mol×K	560.84	Joback Method
cpg	292.30	J/mol×K	526.53	Joback Method
cpg	276.23	J/mol×K	492.21	Joback Method

cpg	259.26	J/mol×K	457.90	Joback Method
cpg	335.48	J/mol×K	629.46	Joback Method
dvisc	0.0002516	Pa×s	423.59	Joback Method
dvisc	0.0003397	Pa×s	383.71	Joback Method
dvisc	0.0004918	Pa×s	343.84	Joback Method
dvisc	0.0007846	Pa×s	303.96	Joback Method
dvisc	0.0014413	Pa×s	264.08	Joback Method
dvisc	0.0032873	Pa×s	224.21	Joback Method
dvisc	0.0107110	Pa×s	184.33	Joback Method

Sources

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=R15874&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume