(2-Methylbutyl)cyclohexane

Inchi: InChI=1S/C11H22/c1-3-10(2)9-11-7-5-4-6-8-11/h10-11H,3-9H2,1-2H3
InchiKey: DDQXBDLAGHZBMP-UHFFFAOYSA-N
Formula: C11H22
SMILES: CCC(C)CC1CCCCC1
Mol. weight [g/mol]: 154.29
CAS: 54105-77-0

Physical Properties

Property code	Value	Unit	Source
gf	63.75	kJ/mol	Joback Method
hf	-221.33	kJ/mol	Joback Method
hfus	12.56	kJ/mol	Joback Method
hvap	40.12	kJ/mol	Joback Method
log10ws	-3.84		Crippen Method
logp	4.003		Crippen Method
mcvol	154.990	ml/mol	McGowan Method
pc	2354.20	kPa	Joback Method
tb	470.19	K	Joback Method
tc	669.19	K	Joback Method
tf	206.11	K	Joback Method
vc	0.579	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	346.68	J/mol×K	470.19	Joback Method
cpg	367.48	J/mol×K	503.36	Joback Method
cpg	387.26	J/mol×K	536.52	Joback Method
cpg	406.04	J/mol×K	569.69	Joback Method
cpg	423.85	J/mol×K	602.85	Joback Method
cpg	440.74	J/mol×K	636.02	Joback Method
cpg	456.71	J/mol×K	669.19	Joback Method
dvisc	0.0145054	Pa×s	206.11	Joback Method
dvisc	0.0040021	Pa×s	250.12	Joback Method

dvisc	0.0016233	Pa×s	294.14	Joback Method
dvisc	0.0008328	Pa×s	338.15	Joback Method
dvisc	0.0004983	Pa×s	382.16	Joback Method
dvisc	0.0003315	Pa×s	426.18	Joback Method
dvisc	0.0002380	Pa×s	470.19	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=C54105770&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume