Cyclohexanemethanol, «alpha»-propyl-

Other names: 1-Cyclohexyl-1-butanol
«alpha»-propylcyclohexanemethanol
Inchi: InChI=1S/C10H20O/c1-2-6-10(11)9-7-4-3-5-8-9/h9-11H,2-8H2,1H3
InchiKey: MTUCYAOJXPTLHZ-UHFFFAOYSA-N
Formula: C10H20O
SMILES: CCCC(O)C1CCCCC1
Mol. weight [g/mol]: 156.27
CAS: 4352-42-5

Physical Properties

Property code	Value	Unit	Source
gf	-81.49	kJ/mol	Joback Method
hf	-352.92	kJ/mol	Joback Method
hfus	14.06	kJ/mol	Joback Method
hvap	54.57	kJ/mol	Joback Method
log10ws	-3.04		Crippen Method
logp	2.728		Crippen Method
mcvol	146.770	ml/mol	McGowan Method
pc	2850.52	kPa	Joback Method
tb	539.49	K	Joback Method
tc	729.46	K	Joback Method
tf	255.66	K	Joback Method
vc	0.541	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	368.91	J/mol×K	539.49	Joback Method
cpg	444.37	J/mol×K	697.80	Joback Method
cpg	430.86	J/mol×K	666.13	Joback Method
cpg	416.58	J/mol×K	634.47	Joback Method
cpg	401.51	J/mol×K	602.81	Joback Method
cpg	385.63	J/mol×K	571.15	Joback Method
cpg	457.14	J/mol×K	729.46	Joback Method

dvisc	0.0001153	Pa×s	539.49	Joback Method
dvisc	0.0002016	Pa×s	492.19	Joback Method
dvisc	0.0003967	Pa×s	444.88	Joback Method
dvisc	0.0009171	Pa×s	397.58	Joback Method
dvisc	0.0026589	Pa×s	350.27	Joback Method
dvisc	0.0107493	Pa×s	302.97	Joback Method
dvisc	0.0728722	Pa×s	255.66	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=C4352425&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