Propane, 2-cyclohexyl-2-phenyl-

Inchi: InChI=1S/C15H22/c1-15(2,13-9-5-3-6-10-13)14-11-7-4-8-12-14/h3,5-6,9-10,14H,4,7-8,11
InchiKey: HXOSWOZZJNCLJL-UHFFFAOYSA-N
Formula: C15H22
SMILES: CC(C)(c1ccccc1)C1CCCCC1
Mol. weight [g/mol]: 202.34
CAS: 25683-97-0

Physical Properties

Property code	Value	Unit	Source
gf	215.12	kJ/mol	Joback Method
hf	-70.83	kJ/mol	Joback Method
hfus	13.07	kJ/mol	Joback Method
hvap	50.39	kJ/mol	Joback Method
log10ws	-4.53		Crippen Method
logp	4.545		Crippen Method
mcvol	187.590	ml/mol	McGowan Method
pc	2261.11	kPa	Joback Method
tb	555.13 ± 0.30	K	NIST Webbook
tc	827.31	K	Joback Method
tf	295.03	K	Joback Method
vc	0.690	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	486.99	J/mol×K	585.60	Joback Method
cpg	511.00	J/mol×K	625.88	Joback Method
cpg	533.20	J/mol×K	666.17	Joback Method
cpg	553.67	J/mol×K	706.45	Joback Method
cpg	572.55	J/mol×K	746.74	Joback Method
cpg	589.92	J/mol×K	787.02	Joback Method
cpg	605.90	J/mol×K	827.31	Joback Method
dvisc	0.0056805	Pa×s	295.03	Joback Method
dvisc	0.0020613	Pa×s	343.46	Joback Method

dvisc	0.0009610	Pa×s	391.89	Joback Method
dvisc	0.0005299	Pa×s	440.31	Joback Method
dvisc	0.0003288	Pa×s	488.74	Joback Method
dvisc	0.0002223	Pa×s	537.17	Joback Method
dvisc	0.0001604	Pa×s	585.60	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=C25683970&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

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