Cyclopentane, 1,1'-(1,4-butandiyl)bis-

Other names:	Butane, 1,4-dicyclopentyl- Cyclopentane, 1,1'-(1,4-butanediyl)bis- 1,4-dicyclopentylbutane 1,1'-(1,4-butandiyl)biscyclopentane
Inchi:	InChI=1S/C14H26/c1-2-8-13(7-1)11-5-6-12-14-9-3-4-10-14/h13-14H,1-12H2
InchiKey:	DDFOSKBMELVNDG-UHFFFAOYSA-N
Formula:	C14H26
SMILES:	C1CCC(CCCCC2CCCC2)C1
Mol. weight [g/mol]:	194.36
CAS:	2980-70-3

Physical Properties

Property code	Value	Unit	Source
gf	140.10	kJ/mol	Joback Method
hf	-211.33	kJ/mol	Joback Method
hfus	19.89	kJ/mol	Joback Method
hvap	47.27	kJ/mol	Joback Method
log10ws	-4.99		Crippen Method
logp	4.927		Crippen Method
mcvol	186.400	ml/mol	McGowan Method
pc	2062.36	kPa	Joback Method
tb	550.28	K	Joback Method
tc	758.69	K	Joback Method
tf	269.34	K	Joback Method
vc	0.702	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	486.59	J/mol×K	550.28	Joback Method
cpg	594.20	J/mol×K	723.96	Joback Method
cpg	575.25	J/mol×K	689.22	Joback Method
cpg	555.07	J/mol×K	654.49	Joback Method
cpg	533.61	J/mol×K	619.75	Joback Method

cpg	510.80	J/mol×K	585.02	Joback Method
cpg	611.99	J/mol×K	758.69	Joback Method
dvisc	0.0003442	Pa×s	550.28	Joback Method
dvisc	0.0004398	Pa×s	503.46	Joback Method
dvisc	0.0005909	Pa×s	456.63	Joback Method
dvisc	0.0008495	Pa×s	409.81	Joback Method
dvisc	0.0013410	Pa×s	362.99	Joback Method
dvisc	0.0024235	Pa×s	316.16	Joback Method
dvisc	0.0053805	Pa×s	269.34	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=C2980703&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

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