Cyclopentane, 1,1'-[3-(2-cyclopentylethylidene)-1,5-pentanediyl]b

Other names: 1,5-Dicyclopentyl-3-(2-cyclopentyl-ethyl)-2-pentene
1,5-Dicylopentyl-3-(2-cyclopentylethyl)-2-pentene

Inchi: InChI=1S/C22H38/c1-2-8-19(7-1)13-16-22(17-14-20-9-3-4-10-20)18-15-21-11-5-6-12-21/

InchiKey: FWPQRPMGONIMIV-UHFFFAOYSA-N

Formula: C22H38

SMILES: C(CC1CCCC1)=C(CCC1CCCC1)CCC1CCCC1

Mol. weight [g/mol]: 302.54

CAS: 54934-71-3

Physical Properties

Property code	Value	Unit	Source
gf	315.68	kJ/mol	Joback Method
hf	-208.54	kJ/mol	Joback Method
hfus	33.43	kJ/mol	Joback Method
hvap	65.38	kJ/mol	Joback Method
log10ws	-7.84		Crippen Method
logp	7.434		Crippen Method
mcvol	283.960	ml/mol	McGowan Method
pc	1338.82	kPa	Joback Method
tb	752.64	K	Joback Method
tc	972.35	K	Joback Method
tf	351.36	K	Joback Method
vc	1.071	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1040.74	J/mol×K	935.73	Joback Method
cpg	924.39	J/mol×K	752.64	Joback Method
cpg	950.90	J/mol×K	789.26	Joback Method
cpg	975.67	J/mol×K	825.88	Joback Method
cpg	998.82	J/mol×K	862.50	Joback Method
cpg	1020.47	J/mol×K	899.12	Joback Method
cpg	1059.76	J/mol×K	972.35	Joback Method

hvapt	81.40	kJ/mol	459.50	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C54934713&Units=SI
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

Legend

cpg:	Ideal gas heat capacity
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
hvapt:	Enthalpy of vaporization at a given temperature
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