1,1-Bis(ethylcyclohexyl)ethane

Inchi: InChI=1S/C18H34/c1-4-17(12-8-6-9-13-17)16(3)18(5-2)14-10-7-11-15-18/h16H,4-15H2,1
InchiKey: HXBDGYWGALHERR-UHFFFAOYSA-N
Formula: C18H34
SMILES: CCC1(C(C)C2(CC)CCCCC2)CCCCC1
Mol. weight [g/mol]: 250.46
CAS: 98803-07-7

Physical Properties

Property code	Value	Unit	Source
gf	136.16	kJ/mol	Joback Method
hf	-281.01	kJ/mol	Joback Method
hfus	9.93	kJ/mol	Joback Method
hvap	53.83	kJ/mol	Joback Method
log10ws	-6.42		Crippen Method
logp	6.344		Crippen Method
mcvol	242.760	ml/mol	McGowan Method
pc	1682.41	kPa	Joback Method
tb	650.38	K	Joback Method
tc	879.20	K	Joback Method
tf	340.18	K	Joback Method
vc	0.899	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	836.77	J/mol×K	841.06	Joback Method
cpg	711.04	J/mol×K	650.38	Joback Method
cpg	738.53	J/mol×K	688.52	Joback Method
cpg	764.58	J/mol×K	726.65	Joback Method
cpg	789.45	J/mol×K	764.79	Joback Method
cpg	813.42	J/mol×K	802.92	Joback Method
cpg	859.75	J/mol×K	879.20	Joback Method
cpl	477.80	J/mol×K	313.00	NIST Webbook

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=C98803077&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
cpl:	Liquid phase 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
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