Benzene, 1,1'-(3,3-dimethylbutylidene)bis-

Inchi: InChI=1S/C18H22/c1-18(2,3)14-17(15-10-6-4-7-11-15)16-12-8-5-9-13-16/h4-13,17H,14H
InchiKey: LRFSDPAZFHHGLC-UHFFFAOYSA-N
Formula: C18H22
SMILES: CC(C)(C)CC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 238.37
CAS: 57123-34-9

Physical Properties

Property code	Value	Unit	Source
gf	325.90	kJ/mol	Joback Method
hf	44.18	kJ/mol	Joback Method
hfus	19.52	kJ/mol	Joback Method
hvap	58.53	kJ/mol	Joback Method
log10ws	-5.39		Crippen Method
logp	5.255		Crippen Method
mcvol	216.960	ml/mol	McGowan Method
pc	1963.07	kPa	Joback Method
tb	589.00 ± 8.00	K	NIST Webbook
tb	589.00 ± 6.00	K	NIST Webbook
tc	900.34	K	Joback Method
tf	306.00 ± 4.00	K	NIST Webbook
tf	306.00 ± 4.00	K	NIST Webbook
vc	0.810	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	580.95	J/mol×K	660.93	Joback Method
cpg	668.97	J/mol×K	860.44	Joback Method
cpg	654.11	J/mol×K	820.53	Joback Method
cpg	638.00	J/mol×K	780.63	Joback Method
cpg	620.52	J/mol×K	740.73	Joback Method
cpg	601.55	J/mol×K	700.83	Joback Method
cpg	682.70	J/mol×K	900.34	Joback Method

dvisc	0.0000981	Pa×s	660.93	Joback Method
dvisc	0.0001352	Pa×s	606.25	Joback Method
dvisc	0.0001985	Pa×s	551.58	Joback Method
dvisc	0.0003172	Pa×s	496.90	Joback Method
dvisc	0.0005694	Pa×s	442.23	Joback Method
dvisc	0.0012051	Pa×s	387.56	Joback Method
dvisc	0.0032634	Pa×s	332.88	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C57123349&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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