Benzene, 1,1'-ethylidenebis[4-ethyl-

Other names: Ethane, 1,1-bis(p-ethylphenyl)-
1,1-(4,4'-diethyl)diphenylethane
Inchi: InChI=1S/C18H22/c1-4-15-6-10-17(11-7-15)14(3)18-12-8-16(5-2)9-13-18/h6-14H,4-5H2,
InchiKey: KXQKDDDZWYVBIU-UHFFFAOYSA-N
Formula: C18H22
SMILES: CCc1ccc(C(C)c2ccc(CC)cc2)cc1
Mol. weight [g/mol]: 238.37
CAS: 10224-91-6

Physical Properties

Property code	Value	Unit	Source
gf	303.80	kJ/mol	Joback Method
hf	29.99	kJ/mol	Joback Method
hfus	26.16	kJ/mol	Joback Method
hvap	61.15	kJ/mol	Joback Method
log10ws	-5.56		Crippen Method
logp	4.963		Crippen Method
mcvol	216.960	ml/mol	McGowan Method
pc	1880.53	kPa	Joback Method
tb	674.12	K	Joback Method
tc	901.79	K	Joback Method
tf	355.50	K	Joback Method
vc	0.822	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	577.71	J/mol×K	674.12	Joback Method
cpg	596.96	J/mol×K	712.07	Joback Method
cpg	614.90	J/mol×K	750.01	Joback Method
cpg	631.61	J/mol×K	787.96	Joback Method
cpg	647.15	J/mol×K	825.90	Joback Method
cpg	661.59	J/mol×K	863.85	Joback Method
cpg	675.00	J/mol×K	901.79	Joback Method

dvisc	0.0016331	Pa×s	355.50	Joback Method
dvisc	0.0007839	Pa×s	408.60	Joback Method
dvisc	0.0004455	Pa×s	461.71	Joback Method
dvisc	0.0002845	Pa×s	514.81	Joback Method
dvisc	0.0001976	Pa×s	567.91	Joback Method
dvisc	0.0001460	Pa×s	621.02	Joback Method
dvisc	0.0001132	Pa×s	674.12	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=C10224916&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