Benzene, 1,2-diethyl-3,4,5,6-tetramethyl-

Other names: 1,2-diethyl-3,4,5,6-tetramethylbenzene
Inchi: InChI=1S/C14H22/c1-7-13-11(5)9(3)10(4)12(6)14(13)8-2/h7-8H2,1-6H3
InchiKey: NHBSDRVFXFTYBZ-UHFFFAOYSA-N
Formula: C14H22
SMILES: CCc1c(C)c(C)c(C)c(C)c1CC
Mol. weight [g/mol]: 190.32
CAS: 33884-69-4

Physical Properties

Property code	Value	Unit	Source
gf	131.26	kJ/mol	Joback Method
hf	-153.11	kJ/mol	Joback Method
hfus	24.11	kJ/mol	Joback Method
hvap	52.34	kJ/mol	Joback Method
log10ws	-4.98		Crippen Method
logp	4.045		Crippen Method
mcvol	184.360	ml/mol	McGowan Method
pc	1880.53	kPa	Joback Method
tb	571.30	K	Joback Method
tc	770.40	K	Joback Method
tf	336.56	K	Joback Method
vc	0.712	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	443.71	J/mol×K	571.30	Joback Method
cpg	460.50	J/mol×K	604.48	Joback Method
cpg	476.56	J/mol×K	637.67	Joback Method
cpg	491.90	J/mol×K	670.85	Joback Method
cpg	506.54	J/mol×K	704.03	Joback Method
cpg	520.48	J/mol×K	737.21	Joback Method
cpg	533.75	J/mol×K	770.40	Joback Method
dvisc	0.0008972	Pa×s	336.56	Joback Method

dvisc	0.0005807	Pa×s	375.68	Joback Method
dvisc	0.0004080	Pa×s	414.81	Joback Method
dvisc	0.0003047	Pa×s	453.93	Joback Method
dvisc	0.0002383	Pa×s	493.05	Joback Method
dvisc	0.0001932	Pa×s	532.18	Joback Method
dvisc	0.0001613	Pa×s	571.30	Joback Method

Sources

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=C33884694&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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