Benzene, 1,2-dibutyl

Inchi: InChI=1S/C14H22/c1-3-5-9-13-11-7-8-12-14(13)10-6-4-2/h7-8,11-12H,3-6,9-10H2,1-2H3
InchiKey: NMUWSGQKPAEPBA-UHFFFAOYSA-N
Formula: C14H22
SMILES: CCCCc1ccccc1CCCC
Mol. weight [g/mol]: 190.32

Physical Properties

Property code	Value	Unit	Source
gf	169.78	kJ/mol	Joback Method
hf	-107.23	kJ/mol	Joback Method
hfus	25.67	kJ/mol	Joback Method
hvap	49.70	kJ/mol	Joback Method
log10ws	-4.75		Crippen Method
logp	4.372		Crippen Method
mcvol	184.360	ml/mol	McGowan Method
pc	1982.35	kPa	Joback Method
rinpol	1370.00		NIST Webbook
rinpol	1370.00		NIST Webbook
tb	551.38	K	Joback Method
tc	746.43	K	Joback Method
tf	286.48	K	Joback Method
vc	0.712	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	442.44	J/mol×K	551.38	Joback Method
cpg	522.99	J/mol×K	713.92	Joback Method
cpg	508.57	J/mol×K	681.42	Joback Method
cpg	493.33	J/mol×K	648.91	Joback Method
cpg	477.25	J/mol×K	616.40	Joback Method
cpg	460.30	J/mol×K	583.89	Joback Method
cpg	536.64	J/mol×K	746.43	Joback Method
dvisc	0.0001755	Pa×s	551.38	Joback Method

dvisc	0.0002263	Pa×s	507.23	Joback Method
dvisc	0.0003064	Pa×s	463.08	Joback Method
dvisc	0.0004420	Pa×s	418.93	Joback Method
dvisc	0.0006953	Pa×s	374.78	Joback Method
dvisc	0.0012344	Pa×s	330.63	Joback Method
dvisc	0.0026153	Pa×s	286.48	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R13606&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume