Benzene, 1,3-bis(1-methylpropyl)-

Other names: Benzene, m-di-sec-butyl-
Inchi: InChI=1S/C14H22/c1-5-11(3)13-8-7-9-14(10-13)12(4)6-2/h7-12H,5-6H2,1-4H3
InchiKey: SGJNVYYELDBNLA-UHFFFAOYSA-N
Formula: C14H22
SMILES: CCC(C)c1cccc(C(C)CC)c1
Mol. weight [g/mol]: 190.32
CAS: 1079-96-5

Physical Properties

Property code	Value	Unit	Source
gf	164.90	kJ/mol	Joback Method
hf	-117.79	kJ/mol	Joback Method
hfus	18.62	kJ/mol	Joback Method
hvap	48.92	kJ/mol	Joback Method
log10ws	-4.68		Crippen Method
logp	4.714		Crippen Method
mcvol	184.360	ml/mol	McGowan Method
pc	2010.90	kPa	Joback Method
ripol	1478.00		NIST Webbook
ripol	1477.00		NIST Webbook
ripol	1468.00		NIST Webbook
ripol	1487.00		NIST Webbook
ripol	1500.00		NIST Webbook
ripol	1513.00		NIST Webbook
ripol	1468.00		NIST Webbook
ripol	1477.00		NIST Webbook
tb	550.50	K	Joback Method
tc	753.79	K	Joback Method
tf	256.48	K	Joback Method
vc	0.700	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	442.99	J/mol×K	550.50	Joback Method
cpg	527.03	J/mol×K	719.91	Joback Method
cpg	512.08	J/mol×K	686.03	Joback Method
cpg	496.24	J/mol×K	652.14	Joback Method
cpg	479.47	J/mol×K	618.26	Joback Method
cpg	461.73	J/mol×K	584.38	Joback Method
cpg	541.12	J/mol×K	753.79	Joback Method
dvisc	0.0001548	Pa×s	550.50	Joback Method
dvisc	0.0002088	Pa×s	501.50	Joback Method
dvisc	0.0003005	Pa×s	452.49	Joback Method
dvisc	0.0004725	Pa×s	403.49	Joback Method
dvisc	0.0008420	Pa×s	354.49	Joback Method
dvisc	0.0018062	Pa×s	305.48	Joback Method
dvisc	0.0051862	Pa×s	256.48	Joback Method

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=C1079965&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
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume