

Benzene, 1-ethyl-3,5-diisopropyl-

Other names:	Benzene, 1,3-diisopropyl-5-ethyl- Benzene, 1-ethyl-3,5-bis(1-methylethyl)-
Inchi:	InChI=1S/C14H22/c1-6-12-7-13(10(2)3)9-14(8-12)11(4)5/h7-11H,6H2,1-5H3
InchiKey:	HWWKORYFZUHZKW-UHFFFAOYSA-N
Formula:	C14H22
SMILES:	CCc1cc(C(C)C)cc(C(C)C)c1
Mol. weight [g/mol]:	190.32
CAS:	15181-13-2

Physical Properties

Property code	Value	Unit	Source
gf	155.27	kJ/mol	Joback Method
hf	-129.26	kJ/mol	Joback Method
hfus	18.23	kJ/mol	Joback Method
hvap	49.58	kJ/mol	Joback Method
log10ws	-4.64		Crippen Method
logp	4.496		Crippen Method
mcvol	184.360	ml/mol	McGowan Method
pc	1984.12	kPa	Joback Method
tb	555.48	K	Joback Method
tc	759.81	K	Joback Method
tf	269.00	K	Joback Method
vc	0.700	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	443.49	J/molxK	555.48	Joback Method
cpg	461.92	J/molxK	589.54	Joback Method
cpg	479.41	J/molxK	623.59	Joback Method
cpg	495.97	J/molxK	657.65	Joback Method
cpg	511.64	J/molxK	691.70	Joback Method
cpg	526.45	J/molxK	725.76	Joback Method
cpg	540.43	J/molxK	759.81	Joback Method

dvisc	0.0034674	Paxs	269.00	Joback Method
dvisc	0.0013869	Paxs	316.75	Joback Method
dvisc	0.0007052	Paxs	364.49	Joback Method
dvisc	0.0004194	Paxs	412.24	Joback Method
dvisc	0.0002779	Paxs	459.99	Joback Method
dvisc	0.0001989	Paxs	507.73	Joback Method
dvisc	0.0001508	Paxs	555.48	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C15181132&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

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