1,3-Diisopropyl-5-n-Propylbenzene

Inchi: InChI=1S/C13H20/c1-5-6-12-7-11(4)8-13(9-12)10(2)3/h7-10H,5-6H2,1-4H3
InchiKey: HPMXLFXGBONERG-UHFFFAOYSA-N
Formula: C13H20
SMILES: CCCc1cc(C)cc(C(C)C)c1
Mol. weight [g/mol]: 176.30

Physical Properties

Property code	Value	Unit	Source
gf	149.29	kJ/mol	Joback Method
hf	-103.34	kJ/mol	Joback Method
hfus	19.17	kJ/mol	Joback Method
hvap	47.74	kJ/mol	Joback Method
log10ws	-4.35		Crippen Method
logp	4.071		Crippen Method
mcvol	170.270	ml/mol	McGowan Method
pc	2149.31	kPa	Joback Method
ripol	1512.60		NIST Webbook
tb	533.04	K	Joback Method
tc	736.09	K	Joback Method
tf	272.73	K	Joback Method
vc	0.649	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	394.24	J/mol×K	533.04	Joback Method
cpg	472.50	J/mol×K	702.25	Joback Method
cpg	458.48	J/mol×K	668.41	Joback Method
cpg	443.68	J/mol×K	634.57	Joback Method
cpg	428.05	J/mol×K	600.72	Joback Method
cpg	411.58	J/mol×K	566.88	Joback Method
cpg	485.75	J/mol×K	736.09	Joback Method
dvisc	0.0001722	Pa×s	533.04	Joback Method
dvisc	0.0002211	Pa×s	489.65	Joback Method

dvisc	0.0002980	Pa×s	446.27	Joback Method
dvisc	0.0004283	Pa×s	402.88	Joback Method
dvisc	0.0006720	Pa×s	359.50	Joback Method
dvisc	0.0011928	Pa×s	316.12	Joback Method
dvisc	0.0025416	Pa×s	272.73	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R305589&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

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