1-Isopropyl-3,5-di-n-Propylbenzene

Inchi: InChI=1S/C15H24/c1-5-7-13-9-14(8-6-2)11-15(10-13)12(3)4/h9-12H,5-8H2,1-4H3
InchiKey: PBFVIHCLUVKHFV-UHFFFAOYSA-N
Formula: C15H24
SMILES: CCCc1cc(CCC)cc(C(C)C)c1
Mol. weight [g/mol]: 204.35

Physical Properties

Property code	Value	Unit	Source
gf	166.13	kJ/mol	Joback Method
hf	-144.62	kJ/mol	Joback Method
hfus	24.35	kJ/mol	Joback Method
hvap	52.20	kJ/mol	Joback Method
log10ws	-5.10		Crippen Method
logp	4.715		Crippen Method
mcvol	198.450	ml/mol	McGowan Method
pc	1812.32	kPa	Joback Method
ripol	1564.00		NIST Webbook
ripol	1563.60		NIST Webbook
ripol	1564.00		NIST Webbook
tb	578.80	K	Joback Method
tc	776.15	K	Joback Method
tf	295.27	K	Joback Method
vc	0.761	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	493.80	J/mol×K	578.80	Joback Method
cpg	577.53	J/mol×K	743.26	Joback Method
cpg	562.52	J/mol×K	710.37	Joback Method
cpg	546.68	J/mol×K	677.48	Joback Method
cpg	529.97	J/mol×K	644.58	Joback Method
cpg	512.35	J/mol×K	611.69	Joback Method
cpg	591.72	J/mol×K	776.15	Joback Method

dvisc	0.0001485	Pa×s	578.80	Joback Method
dvisc	0.0001926	Pa×s	531.54	Joback Method
dvisc	0.0002628	Pa×s	484.29	Joback Method
dvisc	0.0003833	Pa×s	437.03	Joback Method
dvisc	0.0006129	Pa×s	389.78	Joback Method
dvisc	0.0011153	Pa×s	342.52	Joback Method
dvisc	0.0024583	Pa×s	295.27	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R305683&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume