Phenol, 4-(1,2,3,4-tetramethylpentyl), diastereomer # 1

Inchi: InChI=1S/C15H24O/c1-10(2)11(3)12(4)13(5)14-6-8-15(16)9-7-14/h6-13,16H,1-5H3
InchiKey: HDLNIBQHVYIWEW-UHFFFAOYSA-N
Formula: C15H24O
SMILES: CC(C)C(C)C(C)C(C)c1ccc(O)cc1
Mol. weight [g/mol]: 220.35

Physical Properties

Property code	Value	Unit	Source
gf	23.45	kJ/mol	Joback Method
hf	-314.83	kJ/mol	Joback Method
hfus	20.34	kJ/mol	Joback Method
hvap	62.72	kJ/mol	Joback Method
log10ws	-3.99		Crippen Method
logp	4.424		Crippen Method
mcvol	204.320	ml/mol	McGowan Method
pc	2171.40	kPa	Joback Method
rinpol	1747.00		NIST Webbook
rinpol	1747.00		NIST Webbook
tb	648.14	K	Joback Method
tc	865.70	K	Joback Method
tf	336.95	K	Joback Method
vc	0.710	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	559.41	J/mol×K	648.14	Joback Method
cpg	577.68	J/mol×K	684.40	Joback Method
cpg	594.82	J/mol×K	720.66	Joback Method
cpg	610.93	J/mol×K	756.92	Joback Method
cpg	626.10	J/mol×K	793.18	Joback Method
cpg	640.43	J/mol×K	829.44	Joback Method
cpg	654.00	J/mol×K	865.70	Joback Method
dvisc	0.0079615	Pa×s	336.95	Joback Method

dvisc	0.0013836	Pa×s	388.81	Joback Method
dvisc	0.0003630	Pa×s	440.68	Joback Method
dvisc	0.0001262	Pa×s	492.54	Joback Method
dvisc	0.0000537	Pa×s	544.41	Joback Method
dvisc	0.0000265	Pa×s	596.27	Joback Method
dvisc	0.0000146	Pa×s	648.14	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=R592471&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume