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

Inchi: InChI=1S/C15H24O/c1-6-11(2)12(3)15(4,5)13-7-9-14(16)10-8-13/h7-12,16H,6H2,1-5H3
InchiKey: HGQNCRWGYCBKAU-UHFFFAOYSA-N
Formula: C15H24O
SMILES: CCC(C)C(C)C(C)(C)c1ccc(O)cc1
Mol. weight [g/mol]: 220.35

Physical Properties

Property code	Value	Unit	Source
gf	31.17	kJ/mol	Joback Method
hf	-313.02	kJ/mol	Joback Method
hfus	19.97	kJ/mol	Joback Method
hvap	62.20	kJ/mol	Joback Method
log10ws	-3.94		Crippen Method
logp	4.352		Crippen Method
mcvol	204.320	ml/mol	McGowan Method
pc	2177.49	kPa	Joback Method
rinpol	1733.00		NIST Webbook
rinpol	1733.00		NIST Webbook
tb	645.79	K	Joback Method
tc	866.98	K	Joback Method
tf	369.37	K	Joback Method
vc	0.711	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	561.35	J/mol×K	645.79	Joback Method
cpg	641.94	J/mol×K	830.11	Joback Method
cpg	627.76	J/mol×K	793.25	Joback Method
cpg	612.74	J/mol×K	756.38	Joback Method
cpg	596.74	J/mol×K	719.52	Joback Method
cpg	579.65	J/mol×K	682.65	Joback Method
cpg	655.38	J/mol×K	866.98	Joback Method
dvisc	0.0000148	Pa×s	645.79	Joback Method

dvisc	0.0000256	Pa×s	599.72	Joback Method
dvisc	0.0000484	Pa×s	553.65	Joback Method
dvisc	0.0001026	Pa×s	507.58	Joback Method
dvisc	0.0002529	Pa×s	461.51	Joback Method
dvisc	0.0007611	Pa×s	415.44	Joback Method
dvisc	0.0030151	Pa×s	369.37	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R592035&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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