

Phenol, 4-(1-methyloctyl)

Inchi:	InChI=1S/C15H24O/c1-3-4-5-6-7-8-13(2)14-9-11-15(16)12-10-14/h9-13,16H,3-8H2,1-2H
InchiKey:	VFONHVBSRNKIAY-UHFFFAOYSA-N
Formula:	C15H24O
SMILES:	CCCCCCCC(C)c1ccc(O)cc1
Mol. weight [g/mol]:	220.35

Physical Properties

Property code	Value	Unit	Source
gf	30.77	kJ/mol	Joback Method
hf	-298.99	kJ/mol	Joback Method
hfus	30.91	kJ/mol	Joback Method
hvap	63.89	kJ/mol	Joback Method
log10ws	-4.72		Crippen Method
logp	4.856		Crippen Method
mcvol	204.320	ml/mol	McGowan Method
pc	2123.64	kPa	Joback Method
rinsol	1788.00		NIST Webbook
tb	649.46	K	Joback Method
tc	854.96	K	Joback Method
tf	381.95	K	Joback Method
vc	0.728	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	558.07	J/molxK	649.46	Joback Method
cpg	575.21	J/molxK	683.71	Joback Method
cpg	591.38	J/molxK	717.96	Joback Method
cpg	606.65	J/molxK	752.21	Joback Method
cpg	621.10	J/molxK	786.46	Joback Method
cpg	634.82	J/molxK	820.71	Joback Method
cpg	647.87	J/molxK	854.96	Joback Method
dvisc	0.0018851	Paxs	381.95	Joback Method
dvisc	0.0005800	Paxs	426.53	Joback Method

dvisc	0.0002231	Paxs	471.12	Joback Method
dvisc	0.0001012	Paxs	515.71	Joback Method
dvisc	0.0000521	Paxs	560.29	Joback Method
dvisc	0.0000295	Paxs	604.88	Joback Method
dvisc	0.0000181	Paxs	649.46	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=R592857&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

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