

Phenol, 4-(1-ethyl-1-propylbutyl)

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

Physical Properties

Property code	Value	Unit	Source
gf	36.05	kJ/mol	Joback Method
hf	-302.46	kJ/mol	Joback Method
hfus	27.02	kJ/mol	Joback Method
hvap	62.98	kJ/mol	Joback Method
log10ws	-4.43		Crippen Method
logp	4.640		Crippen Method
mvol	204.320	ml/mol	McGowan Method
pc	2145.33	kPa	Joback Method
rinpol	1764.00		NIST Webbook
rinpol	1764.00		NIST Webbook
tb	646.67	K	Joback Method
tc	859.37	K	Joback Method
tf	399.37	K	Joback Method
vc	0.723	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	560.46	J/molxK	646.67	Joback Method
cpg	577.98	J/molxK	682.12	Joback Method
cpg	594.40	J/molxK	717.57	Joback Method
cpg	609.82	J/molxK	753.02	Joback Method
cpg	624.36	J/molxK	788.47	Joback Method
cpg	638.12	J/molxK	823.92	Joback Method
cpg	651.21	J/molxK	859.37	Joback Method
dvisc	0.0012837	Paxs	399.37	Joback Method

dvisc	0.0004464	Paxs	440.59	Joback Method
dvisc	0.0001860	Paxs	481.80	Joback Method
dvisc	0.0000889	Paxs	523.02	Joback Method
dvisc	0.0000474	Paxs	564.24	Joback Method
dvisc	0.0000275	Paxs	605.45	Joback Method
dvisc	0.0000171	Paxs	646.67	Joback Method

Sources

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=R592322&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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