

(R)-(+)-1-Phenyl-1-propanol

Other names:	R-(+)-1-Phenylpropanol
Inchi:	InChI=1S/C9H12O/c1-2-9(10)8-6-4-3-5-7-8/h3-7,9-10H,2H2,1H3/t9-/m0/s1
InchiKey:	DYUQAZSOFZSPHD-VIFPVBQESA-N
Formula:	C9H12O
SMILES:	CCC(O)c1ccccc1
Mol. weight [g/mol]:	136.19
CAS:	1565-74-8

Physical Properties

Property code	Value	Unit	Source
gf	-1.95	kJ/mol	Joback Method
hf	-150.07	kJ/mol	Joback Method
hfus	13.67	kJ/mol	Joback Method
hvap	54.19	kJ/mol	Joback Method
log10ws	-2.42		Crippen Method
logp	2.130		Crippen Method
mcvol	119.780	ml/mol	McGowan Method
pc	3668.65	kPa	Joback Method
tb	523.74	K	Joback Method
tc	722.83	K	Joback Method
tf	263.43	K	Joback Method
vc	0.445	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	267.01	J/mol×K	523.74	Joback Method
cpg	278.99	J/mol×K	556.92	Joback Method
cpg	290.28	J/mol×K	590.10	Joback Method
cpg	300.91	J/mol×K	623.28	Joback Method
cpg	310.91	J/mol×K	656.46	Joback Method
cpg	320.31	J/mol×K	689.65	Joback Method
cpg	329.13	J/mol×K	722.83	Joback Method
dvisc	0.0307952	Paxs	263.43	Joback Method

dvisc	0.0063252	Paxs	306.81	Joback Method
dvisc	0.0019230	Paxs	350.20	Joback Method
dvisc	0.0007602	Paxs	393.59	Joback Method
dvisc	0.0003613	Paxs	436.97	Joback Method
dvisc	0.0001964	Paxs	480.36	Joback Method
dvisc	0.0001181	Paxs	523.74	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1565748&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

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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