Benzaldehyde, 2-hydroxy, 5-octyl

Inchi: InChI=1S/C15H22O2/c1-2-3-4-5-6-7-8-13-9-10-15(17)14(11-13)12-16/h9-12,17H,2-8H2,1
InchiKey: SXIFMUZENYUSFJ-UHFFFAOYSA-N
Formula: C15H22O2
SMILES: CCCCCCCCc1ccc(O)c(C=O)c1
Mol. weight [g/mol]: 234.33

Physical Properties

Property code	Value	Unit	Source
gf	-75.94	kJ/mol	Joback Method
hf	-390.76	kJ/mol	Joback Method
hfus	36.33	kJ/mol	Joback Method
hvap	71.66	kJ/mol	Joback Method
log10ws	-4.58		Crippen Method
logp	4.108		Crippen Method
mcvol	205.890	ml/mol	McGowan Method
pc	2227.09	kPa	Joback Method
rinpol	2085.00		NIST Webbook
rinpol	2085.00		NIST Webbook
tb	703.54	K	Joback Method
tc	908.87	K	Joback Method
tf	451.47	K	Joback Method
vc	0.750	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	577.10	J/mol×K	703.54	Joback Method
cpg	644.32	J/mol×K	874.65	Joback Method
cpg	632.20	J/mol×K	840.43	Joback Method
cpg	619.49	J/mol×K	806.21	Joback Method
cpg	606.12	J/mol×K	771.98	Joback Method
cpg	592.01	J/mol×K	737.76	Joback Method
cpg	655.92	J/mol×K	908.87	Joback Method
dvisc	0.0000169	Pa×s	703.54	Joback Method

dvisc	0.0000252	Pa×s	661.53	Joback Method
dvisc	0.0000397	Pa×s	619.52	Joback Method
dvisc	0.0000666	Pa×s	577.50	Joback Method
dvisc	0.0001212	Pa×s	535.49	Joback Method
dvisc	0.0002444	Pa×s	493.48	Joback Method
dvisc	0.0005613	Pa×s	451.47	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=R256898&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