Benzenemethanol, «alpha»-(1-methylethyl)-, (R)-

Inchi: InChI=1S/C10H14O/c1-8(2)10(11)9-6-4-3-5-7-9/h3-8,10-11H,1-2H3/t10-/m1/s1
InchiKey: GMDYDZMQHRTHJA-SNVBAGLBSA-N
Formula: C10H14O
SMILES: CC(C)C(O)c1ccccc1
Mol. weight [g/mol]: 150.22
CAS: 14898-86-3

Physical Properties

Property code	Value	Unit	Source
gf	4.03	kJ/mol	Joback Method
hf	-175.99	kJ/mol	Joback Method
hfus	12.74	kJ/mol	Joback Method
hvap	56.03	kJ/mol	Joback Method
log10ws	-2.59		Crippen Method
logp	2.376		Crippen Method
mcvol	133.870	ml/mol	McGowan Method
pc	3306.75	kPa	Joback Method
tb	546.18	K	Joback Method
tc	746.67	K	Joback Method
tf	259.70	K	Joback Method
vc	0.494	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	312.39	J/mol×K	546.18	Joback Method
cpg	325.55	J/mol×K	579.60	Joback Method
cpg	337.94	J/mol×K	613.01	Joback Method
cpg	349.61	J/mol×K	646.43	Joback Method
cpg	360.57	J/mol×K	679.84	Joback Method
cpg	370.87	J/mol×K	713.26	Joback Method
cpg	380.53	J/mol×K	746.67	Joback Method
dvisc	0.0475299	Pa×s	259.70	Joback Method
dvisc	0.0075316	Pa×s	307.45	Joback Method

dvisc	0.0019584	Pa×s	355.19	Joback Method
dvisc	0.0007007	Pa×s	402.94	Joback Method
dvisc	0.0003117	Pa×s	450.69	Joback Method
dvisc	0.0001620	Pa×s	498.43	Joback Method
dvisc	0.0000944	Pa×s	546.18	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	397.70	K	2.00	NIST Webbook

Sources

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=C14898863&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point

vc: Critical Volume

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