Benzenemethanol, 4-ethyl-

Other names: Benzyl alcohol, p-ethyl-
p-Ethylbenzyl alcohol
4-Ethylbenzyl alcohol
Inchi: InChI=1S/C9H12O/c1-2-8-3-5-9(7-10)6-4-8/h3-6,10H,2,7H2,1H3
InchiKey: YSLBFFIVJGJBSA-UHFFFAOYSA-N
Formula: C9H12O
SMILES: CCc1ccc(CO)cc1
Mol. weight [g/mol]: 136.19
CAS: 768-59-2

Physical Properties

Property code	Value	Unit	Source
gf	-9.14	kJ/mol	Joback Method
hf	-156.26	kJ/mol	Joback Method
hfus	16.81	kJ/mol	Joback Method
hvap	55.25	kJ/mol	Joback Method
log10ws	-2.42		Crippen Method
logp	1.741		Crippen Method
mcvol	119.780	ml/mol	McGowan Method
pc	3568.53	kPa	Joback Method
ripol	2145.00		NIST Webbook
ripol	2145.00		NIST Webbook
tb	529.16	K	Joback Method
tc	725.15	K	Joback Method
tf	290.95	K	Joback Method
vc	0.451	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	266.45	J/mol×K	529.16	Joback Method
cpg	317.36	J/mol×K	692.49	Joback Method
cpg	308.29	J/mol×K	659.82	Joback Method
cpg	298.68	J/mol×K	627.16	Joback Method

cpg	288.52	J/mol×K	594.49	Joback Method
cpg	277.78	J/mol×K	561.83	Joback Method
cpg	325.92	J/mol×K	725.15	Joback Method
dvisc	0.0001184	Pa×s	529.16	Joback Method
dvisc	0.0001835	Pa×s	489.46	Joback Method
dvisc	0.0003073	Pa×s	449.76	Joback Method
dvisc	0.0005687	Pa×s	410.05	Joback Method
dvisc	0.0012010	Pa×s	370.35	Joback Method
dvisc	0.0030353	Pa×s	330.65	Joback Method
dvisc	0.0098792	Pa×s	290.95	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	389.20	K	1.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C768592&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume