2-Pentanone, 5-hydroxy-

Other names:	«gamma»-Acetopropanol
	3-Acetopropanol
	«gamma»-Acetopropyl alcohol
	3-Acetylpropanol
	3-Acetyl-1-propanol
	«gamma»-Acetylpropyl alcohol
	5-Hydroxy-2-pentanone
	4-Oxo-1-pentanol
	1-Pentanol-4-one
	Acetopropyl alcohol
	Propanol, 3-acetyl-
	NSC 19158
	NSC 33940
	5-hydroxypentan-2-one
Inchi:	InChI=1S/C5H10O2/c1-5(7)3-2-4-6/h6H,2-4H2,1H3
InchiKey:	JSHPTIGHEWEXRW-UHFFFAOYSA-N
Formula:	C5H10O2
SMILES:	CC(=O)CCCO
Mol. weight [g/mol]:	102.13
CAS:	1071-73-4

Physical Properties

Property code	Value	Unit	Source
gf	-274.52	kJ/mol	Joback Method
hf	-411.34	kJ/mol	Joback Method
hfus	14.39	kJ/mol	Joback Method
hvap	50.15	kJ/mol	Joback Method
log10ws	-0.46		Crippen Method
logp	0.348		Crippen Method
mcvol	88.750	ml/mol	McGowan Method
pc	4200.18	kPa	Joback Method
rinpol	687.00		NIST Webbook
tb	459.85	K	Joback Method
tc	632.49	K	Joback Method
tf	256.86	K	Joback Method
vc	0.341	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	183.75	J/mol×K	459.85	Joback Method
cpg	191.56	J/mol×K	488.62	Joback Method
cpg	199.06	J/mol×K	517.40	Joback Method
cpg	206.25	J/mol×K	546.17	Joback Method
cpg	213.15	J/mol×K	574.94	Joback Method
cpg	219.76	J/mol×K	603.72	Joback Method
cpg	226.08	J/mol×K	632.49	Joback Method
dvisc	0.0272118	Pa×s	256.86	Joback Method
dvisc	0.0078379	Pa×s	290.69	Joback Method
dvisc	0.0029265	Pa×s	324.52	Joback Method
dvisc	0.0013161	Pa×s	358.36	Joback Method
dvisc	0.0006794	Pa×s	392.19	Joback Method
dvisc	0.0003895	Pa×s	426.02	Joback Method
dvisc	0.0002424	Pa×s	459.85	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	481.20	K	97.30	NIST Webbook

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=C1071734&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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