4-Penten-2-ol

Other names:	1-Penten-4-ol
	4-Hydroxypent-1-ene
	CH2=CHCH2CH(OH)CH3
	pent-4-en-2-ol
Inchi:	InChI=1S/C5H10O/c1-3-4-5(2)6/h3,5-6H,1,4H2,2H3
InchiKey:	ZHZCYWWNFQUZOR-UHFFFAOYSA-N
Formula:	C5H10O
SMILES:	C=CCC(C)O
Mol. weight [g/mol]:	86.13
CAS:	625-31-0

Physical Properties

Property code	Value	Unit	Source
gf	-60.20	kJ/mol	Joback Method
hf	-178.61	kJ/mol	Joback Method
hfus	7.99	kJ/mol	Joback Method
hvap	42.34	kJ/mol	Joback Method
ie	9.38 ± 0.05	eV	NIST Webbook
log10ws	-1.14		Crippen Method
logp	0.943		Crippen Method
mcvol	82.880	ml/mol	McGowan Method
pc	4130.29	kPa	Joback Method
rinpol	639.00		NIST Webbook
rinpol	675.00		NIST Webbook
rinpol	687.00		NIST Webbook
rinpol	679.00		NIST Webbook
rinpol	673.00		NIST Webbook
rinpol	675.00		NIST Webbook
rinpol	687.00		NIST Webbook
rinpol	679.00		NIST Webbook
rinpol	673.00		NIST Webbook
rinpol	647.00		NIST Webbook
rinpol	639.00		NIST Webbook
rinpol	688.70		NIST Webbook
rinpol	662.00		NIST Webbook
rinpol	639.00		NIST Webbook
rinpol	642.00		NIST Webbook

ripol	1184.00		NIST Webbook
ripol	1154.00		NIST Webbook
ripol	1159.00		NIST Webbook
ripol	1184.00		NIST Webbook
ripol	1154.00		NIST Webbook
ripol	1159.00		NIST Webbook
tb	388.70	K	NIST Webbook
tc	570.76	K	Joback Method
tf	190.17	K	Joback Method
vc	0.309	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	155.14	J/mol×K	402.22	Joback Method
cpg	191.86	J/mol×K	542.67	Joback Method
cpg	185.13	J/mol×K	514.58	Joback Method
cpg	178.10	J/mol×K	486.49	Joback Method
cpg	170.77	J/mol×K	458.40	Joback Method
cpg	163.12	J/mol×K	430.31	Joback Method
cpg	198.29	J/mol×K	570.76	Joback Method
dvisc	0.0002843	Pa×s	402.22	Joback Method
dvisc	0.0005141	Pa×s	366.88	Joback Method
dvisc	0.0010548	Pa×s	331.54	Joback Method
dvisc	0.0025691	Pa×s	296.19	Joback Method
dvisc	0.0079642	Pa×s	260.85	Joback Method
dvisc	0.0351986	Pa×s	225.51	Joback Method
dvisc	0.2702616	Pa×s	190.17	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C625310&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

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
ie:	Ionization energy
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume