2-Penten-1-ol, (E)-

Other names:	2-(E)-Penten-1-ol
	(E)-2-Penten-1-ol
	(E)-2-Pentenol
	Pent-2(E)-enol
	trans-2-Pentenol
	(E)-pent-2-en-1-ol
Inchi:	InChI=1S/C5H10O/c1-2-3-4-5-6/h3-4,6H,2,5H2,1H3/b4-3+
InchiKey:	BTSIZIIPFNVMHF-ONEGZZNKSA-N
Formula:	C5H10O
SMILES:	CCC=CCO
Mol. weight [g/mol]:	86.13
CAS:	1576-96-1

Physical Properties

Property code	Value	Unit	Source
gf	-65.38	kJ/mol	Joback Method
hf	-181.54	kJ/mol	Joback Method
hfus	13.00	kJ/mol	Joback Method
hvap	43.36	kJ/mol	Joback Method
log10ws	-1.03		Crippen Method
logp	0.945		Crippen Method
mcvol	82.880	ml/mol	McGowan Method
pc	4140.93	kPa	Joback Method
rinpol	750.00		NIST Webbook
rinpol	780.00		NIST Webbook
rinpol	750.00		NIST Webbook
rinpol	780.00		NIST Webbook
rinpol	769.00		NIST Webbook
rinpol	759.00		NIST Webbook
rinpol	744.00		NIST Webbook
rinpol	769.00		NIST Webbook
rinpol	744.00		NIST Webbook
rinpol	769.00		NIST Webbook
rinpol	744.00		NIST Webbook
ripol	1305.00		NIST Webbook
ripol	1310.00		NIST Webbook
ripol	1316.00		NIST Webbook

ripol	1306.00	NIST Webbook
ripol	1318.00	NIST Webbook
ripol	1322.00	NIST Webbook
ripol	1316.00	NIST Webbook
ripol	1317.00	NIST Webbook
ripol	1327.00	NIST Webbook
ripol	1319.00	NIST Webbook
ripol	1319.00	NIST Webbook
ripol	1335.00	NIST Webbook
ripol	1338.00	NIST Webbook
ripol	1303.00	NIST Webbook
ripol	1321.00	NIST Webbook
ripol	1321.00	NIST Webbook
ripol	1300.00	NIST Webbook
ripol	1306.00	NIST Webbook
ripol	1325.00	NIST Webbook
ripol	1303.00	NIST Webbook
ripol	1321.00	NIST Webbook
ripol	1307.00	NIST Webbook
ripol	1316.00	NIST Webbook
ripol	1298.00	NIST Webbook
ripol	1302.00	NIST Webbook
ripol	1318.00	NIST Webbook
ripol	1343.00	NIST Webbook
ripol	1313.00	NIST Webbook
ripol	1311.00	NIST Webbook
ripol	1302.00	NIST Webbook
ripol	1299.00	NIST Webbook
ripol	1302.00	NIST Webbook
ripol	1309.00	NIST Webbook
ripol	1307.00	NIST Webbook
ripol	1306.00	NIST Webbook
ripol	1315.00	NIST Webbook
ripol	1320.00	NIST Webbook
ripol	1306.00	NIST Webbook
ripol	1313.00	NIST Webbook
ripol	1333.00	NIST Webbook
ripol	1295.00	NIST Webbook
ripol	1297.00	NIST Webbook
ripol	1309.00	NIST Webbook
ripol	1303.00	NIST Webbook
ripol	1301.00	NIST Webbook
ripol	1306.00	NIST Webbook
ripol	1333.00	NIST Webbook

ripol	1335.00		NIST Webbook
ripol	1300.00		NIST Webbook
ripol	1302.00		NIST Webbook
tb	410.14	K	Joback Method
tc	579.75	K	Joback Method
tf	201.85	K	Joback Method
vc	0.315	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	154.30	J/mol×K	410.14	Joback Method
cpg	190.77	J/mol×K	551.48	Joback Method
cpg	184.13	J/mol×K	523.21	Joback Method
cpg	177.18	J/mol×K	494.94	Joback Method
cpg	169.90	J/mol×K	466.68	Joback Method
cpg	162.28	J/mol×K	438.41	Joback Method
cpg	197.11	J/mol×K	579.75	Joback Method
dvisc	0.0002330	Pa×s	410.14	Joback Method
dvisc	0.0004073	Pa×s	375.42	Joback Method
dvisc	0.0007977	Pa×s	340.71	Joback Method
dvisc	0.0018199	Pa×s	306.00	Joback Method
dvisc	0.0051279	Pa×s	271.28	Joback Method
dvisc	0.0195828	Pa×s	236.56	Joback Method
dvisc	0.1185690	Pa×s	201.85	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1576961&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
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