

2-Penten-1-ol, 2-methyl-

Other names:	2-Methyl-2-penten-1-ol 2-Methyl-2-pentene-1-ol 2-methylpent-2-en-1-ol
Inchi:	InChI=1S/C6H12O/c1-3-4-6(2)5-7/h4,7H,3,5H2,1-2H3/b6-4+
InchiKey:	KIKXGIRAIYTCRB-GQCTYLIASA-N
Formula:	C6H12O
SMILES:	CCC=C(C)CO
Mol. weight [g/mol]:	100.16
CAS:	1610-29-3

Physical Properties

Property code	Value	Unit	Source
gf	-65.51	kJ/mol	Joback Method
hf	-211.97	kJ/mol	Joback Method
hfus	14.28	kJ/mol	Joback Method
hvap	45.67	kJ/mol	Joback Method
log10ws	-1.45		Crippen Method
logp	1.335		Crippen Method
mcvol	96.970	ml/mol	McGowan Method
pc	3695.46	kPa	Joback Method
tb	432.90	K	Joback Method
tc	604.77	K	Joback Method
tf	199.16	K	Joback Method
vc	0.371	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.73	J/molxK	432.90	Joback Method
cpg	201.02	J/molxK	461.54	Joback Method
cpg	209.90	J/molxK	490.19	Joback Method
cpg	218.38	J/molxK	518.83	Joback Method
cpg	226.47	J/molxK	547.48	Joback Method
cpg	234.20	J/molxK	576.12	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.49590e+01
Coeff. B	-3.81371e+03
Coeff. C	-5.69790e+01
Temperature range (K), min.	295.70
Temperature range (K), max.	452.28

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C1610293&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Legend

cpg:	Ideal gas heat capacity
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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature

tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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