2-Pentene, 4-methyl-

Other names:	1,1-Dimethyl-2-butene
	2-Methyl-3-pentene
	4-Methyl-2-pentene
	4-Methyl-2-pentene,c&t
	4-Methyl-2-pentene(c,t)
	4-methylpent-2-ene
Inchi:	InChI=1S/C6H12/c1-4-5-6(2)3/h4-6H,1-3H3
InchiKey:	LGAQJENWWYGFSN-UHFFFAOYSA-N
Formula:	C6H12
SMILES:	CC=CC(C)C
Mol. weight [g/mol]:	84.16
CAS:	4461-48-7

Physical Properties

Property code	Value	Unit	Source
gf	77.42	kJ/mol	Joback Method
hf	-55.23	kJ/mol	Joback Method
hfus	7.98	kJ/mol	Joback Method
hvap	28.52	kJ/mol	Joback Method
log10ws	-1.95		Crippen Method
logp	2.219		Crippen Method
mcvol	91.100	ml/mol	McGowan Method
pc	3325.84	kPa	Joback Method
rinpol	607.00		NIST Webbook
rinpol	562.00		NIST Webbook
rinpol	562.00		NIST Webbook
tb	331.95 ± 0.60	K	NIST Webbook
tb	328.50 ± 0.40	K	NIST Webbook
tb	328.50 ± 0.20	K	NIST Webbook
tb	330.92 ± 1.00	K	NIST Webbook
tb	331.57 ± 1.00	K	NIST Webbook
tc	517.01	K	Joback Method
tf	137.30	K	Joback Method
vc	0.345	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	144.81	J/mol×K	340.40	Joback Method
cpg	193.79	J/mol×K	487.57	Joback Method
cpg	184.87	J/mol×K	458.14	Joback Method
cpg	175.52	J/mol×K	428.70	Joback Method
cpg	165.74	J/mol×K	399.27	Joback Method
cpg	155.51	J/mol×K	369.83	Joback Method
cpg	202.31	J/mol×K	517.01	Joback Method
dvisc	0.0001822	Pa×s	340.40	Joback Method
dvisc	0.0002432	Pa×s	306.55	Joback Method
dvisc	0.0003486	Pa×s	272.70	Joback Method
dvisc	0.0005535	Pa×s	238.85	Joback Method
dvisc	0.0010236	Pa×s	205.00	Joback Method
dvisc	0.0024144	Pa×s	171.15	Joback Method
dvisc	0.0086948	Pa×s	137.30	Joback Method

Sources

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=C4461487&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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