(E)-2-Hexene, 3-methyl

Other names: E-3-methyl-2-hexene
2-Hexene, 3-methyl-, (E)-
trans-3-Methyl-2-hexene
Inchi: InChI=1S/C7H14/c1-4-6-7(3)5-2/h5H,4,6H2,1-3H3/b7-5+
InchiKey: JZMUUSXQSKCZNO-FNORWQNLSA-N
Formula: C7H14
SMILES: CC=C(C)CCC
Mol. weight [g/mol]: 98.19
CAS: 20710-38-7

Physical Properties

Property code	Value	Unit	Source
gf	79.73	kJ/mol	Joback Method
hf	-80.38	kJ/mol	Joback Method
hfus	12.78	kJ/mol	Joback Method
hvap	35.60	kJ/mol	NIST Webbook
log10ws	-2.61		Crippen Method
logp	2.753		Crippen Method
mcvol	105.190	ml/mol	McGowan Method
pc	2976.29	kPa	Joback Method
rinpol	699.50		NIST Webbook
rinpol	701.60		NIST Webbook
rinpol	709.20		NIST Webbook
rinpol	709.20		NIST Webbook
rinpol	709.00		NIST Webbook
rinpol	709.00		NIST Webbook
rinpol	709.00		NIST Webbook
rinpol	708.00		NIST Webbook
rinpol	701.60		NIST Webbook
rinpol	702.00		NIST Webbook
rinpol	704.00		NIST Webbook
rinpol	696.00		NIST Webbook
rinpol	693.00		NIST Webbook
rinpol	694.00		NIST Webbook
rinpol	695.00		NIST Webbook
rinpol	695.00		NIST Webbook
rinpol	712.00		NIST Webbook

rinpol	707.00		NIST Webbook
rinpol	709.50		NIST Webbook
rinpol	710.90		NIST Webbook
rinpol	699.90		NIST Webbook
rinpol	716.00		NIST Webbook
rinpol	703.00		NIST Webbook
rinpol	709.00		NIST Webbook
rinpol	710.00		NIST Webbook
rinpol	709.00		NIST Webbook
rinpol	709.00		NIST Webbook
rinpol	710.00		NIST Webbook
rinpol	694.00		NIST Webbook
rinpol	712.00		NIST Webbook
rinpol	694.00		NIST Webbook
ripol	750.00		NIST Webbook
ripol	739.00		NIST Webbook
ripol	750.00		NIST Webbook
tb	365.15 ± 3.00	K	NIST Webbook
tb	368.39 ± 0.30	K	NIST Webbook
tb	368.38 ± 0.20	K	NIST Webbook
tc	539.41	K	Joback Method
tf	149.61	K	Joback Method
vc	0.408	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	180.34	J/mol×K	363.60	Joback Method
cpg	192.22	J/mol×K	392.90	Joback Method
cpg	203.59	J/mol×K	422.20	Joback Method
cpg	214.47	J/mol×K	451.50	Joback Method
cpg	224.86	J/mol×K	480.80	Joback Method
cpg	234.79	J/mol×K	510.11	Joback Method
cpg	244.29	J/mol×K	539.41	Joback Method
hvapt	34.10	kJ/mol	357.50	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=C20710387&Units=SI

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
hvapt:	Enthalpy of vaporization at a given temperature
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