

1-Hexene, 1-chloro-, (E)-

Other names:	trans-1-Chloro-1-Hexene
Inchi:	InChI=1S/C6H11Cl/c1-2-3-4-5-6-7/h5-6H,2-4H2,1H3/b6-5+
InchiKey:	UZIBPOIXTCIHBH-AATRIKPKSA-N
Formula:	C6H11Cl
SMILES:	CCCCC=CCl
Mol. weight [g/mol]:	118.61
CAS:	50586-19-1

Physical Properties

Property code	Value	Unit	Source
gf	67.93	kJ/mol	Joback Method
hf	-65.69	kJ/mol	Joback Method
hfus	15.69	kJ/mol	Joback Method
hvap	33.29	kJ/mol	Joback Method
log10ws	-2.84		Crippen Method
logp	2.929		Crippen Method
mcvol	103.340	ml/mol	McGowan Method
pc	3159.72	kPa	Joback Method
tb	378.27	K	Joback Method
tc	559.67	K	Joback Method
tf	182.22	K	Joback Method
vc	0.401	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	171.44	J/mol×K	378.27	Joback Method
cpg	217.41	J/mol×K	529.44	Joback Method
cpg	209.10	J/mol×K	499.20	Joback Method
cpg	200.37	J/mol×K	468.97	Joback Method
cpg	191.20	J/mol×K	438.74	Joback Method
cpg	181.56	J/mol×K	408.50	Joback Method
cpg	225.31	J/mol×K	559.67	Joback Method
dvisc	0.0002398	Paxs	378.27	Joback Method

dvisc	0.0003096	Paxs	345.60	Joback Method
dvisc	0.0004217	Paxs	312.92	Joback Method
dvisc	0.0006174	Paxs	280.25	Joback Method
dvisc	0.0009996	Paxs	247.57	Joback Method
dvisc	0.0018736	Paxs	214.89	Joback Method
dvisc	0.0043993	Paxs	182.22	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.38020e+01
Coeff. B	-3.28067e+03
Coeff. C	-5.08070e+01
Temperature range (K), min.	293.56
Temperature range (K), max.	437.20

Sources

The Yaws Handbook of Vapor

Pressure:
Crippen Method:

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

<http://pubs.acs.org/doi/abs/10.1021/ci990307i>

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=C50586191&Units=SI>

Legend

cp_g:	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
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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