

1-Hexene, 1-iodo-, (E)-

Other names:	trans-1-Hexenyl Iodide trans-1-Iodo-1-Hexene trans-1-Iodohexene
Inchi:	InChI=1S/C6H11I/c1-2-3-4-5-6-7/h5-6H,2-4H2,1H3/b6-5+
InchiKey:	TUAPXMNNQGXDDV-AATRIKPKSA-N
Formula:	C6H11I
SMILES:	CCCCC=CI
Mol. weight [g/mol]:	210.06
CAS:	16644-98-7

Physical Properties

Property code	Value	Unit	Source
gf	137.98	kJ/mol	Joback Method
hf	26.92	kJ/mol	Joback Method
hfus	15.90	kJ/mol	Joback Method
hvap	38.28	kJ/mol	Joback Method
log10ws	-3.63		Crippen Method
logp	3.125		Crippen Method
mcvol	116.920	ml/mol	McGowan Method
pc	3213.68	kPa	Joback Method
tb	433.98	K	Joback Method
tc	644.76	K	Joback Method
tf	210.36	K	Joback Method
vc	0.440	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	193.53	J/molxK	433.98	Joback Method
cpg	240.29	J/molxK	609.63	Joback Method
cpg	232.07	J/molxK	574.50	Joback Method
cpg	223.32	J/molxK	539.37	Joback Method
cpg	214.00	J/molxK	504.24	Joback Method
cpg	204.09	J/molxK	469.11	Joback Method

cpg	248.02	J/mol×K	644.76	Joback Method
dvisc	0.0003044	Paxs	433.98	Joback Method
dvisc	0.0003953	Paxs	396.71	Joback Method
dvisc	0.0005419	Paxs	359.44	Joback Method
dvisc	0.0007992	Paxs	322.17	Joback Method
dvisc	0.0013046	Paxs	284.90	Joback Method
dvisc	0.0024684	Paxs	247.63	Joback Method
dvisc	0.0058545	Paxs	210.36	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.81197e+01
Coeff. B	-4.86276e+03
Coeff. C	-6.46240e+01
Temperature range (K), min.	337.32
Temperature range (K), max.	444.28

Sources

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=C16644987&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

Latest version available from:

<https://www.cheméo.com/cid/34-046-3/1-Hexene-1-iodo-E.pdf>

Generated by Cheméo on 2024-05-03 13:06:14.986984218 +0000 UTC m=+17030823.907561531.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.