Cyclohexane, iodo-

Other names:	c-C6H11I
	cyclohexyl iodide
	iodocyclohexane
Inchi:	InChI=1S/C6H11I/c7-6-4-2-1-3-5-6/h6H,1-5H2
InchiKey:	FUCOMWZKWIEKRK-UHFFFAOYSA-N
Formula:	C6H11I
SMILES:	IC1CCCCC1
Mol. weight [g/mol]:	210.06
CAS:	626-62-0

Physical Properties

Property code	Value	Unit	Source
chl	-3835.90 ± 4.20	kJ/mol	NIST Webbook
gf	82.21	kJ/mol	Joback Method
hf	-35.98	kJ/mol	Joback Method
hfus	7.54	kJ/mol	Joback Method
hvap	43.10 ± 0.80	kJ/mol	NIST Webbook
hvap	48.30	kJ/mol	NIST Webbook
ie	8.91	eV	NIST Webbook
ie	9.00	eV	NIST Webbook
log10ws	-3.29		Crippen Method
logp	2.754		Crippen Method
mcvol	110.360	ml/mol	McGowan Method
pc	3853.09	kPa	Joback Method
rinpol	1117.00		NIST Webbook
rinpol	1070.00		NIST Webbook
rinpol	1070.00		NIST Webbook
rinpol	1070.00		NIST Webbook
rinpol	1117.00		NIST Webbook
rinpol	1067.00		NIST Webbook
ripol	1449.00		NIST Webbook
ripol	1405.00		NIST Webbook
ripol	1449.00		NIST Webbook
ripol	1449.00		NIST Webbook
ripol	1449.00		NIST Webbook
tb	449.37	K	Joback Method
tc	695.81	K	Joback Method

tf	222.82	K	Joback Method
vc	0.393	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	189.82	J/mol×K	449.37	Joback Method
cpg	219.24	J/mol×K	531.52	Joback Method
cpg	244.74	J/mol×K	613.66	Joback Method
cpg	256.14	J/mol×K	654.74	Joback Method
cpg	266.70	J/mol×K	695.81	Joback Method
cpg	205.04	J/mol×K	490.44	Joback Method
cpg	232.46	J/mol×K	572.59	Joback Method
dvisc	0.0087731	Pa×s	222.82	Joback Method
dvisc	0.0018819	Pa×s	298.34	Joback Method
dvisc	0.0011298	Pa×s	336.10	Joback Method
dvisc	0.0007519	Pa×s	373.85	Joback Method
dvisc	0.0004089	Pa×s	449.37	Joback Method
dvisc	0.0005392	Pa×s	411.61	Joback Method
dvisc	0.0036344	Pa×s	260.58	Joback Method
hvapt	43.00	kJ/mol	383.00	NIST Webbook
pvap	0.13	kPa	298.15	Vapor Pressure of Selected Organic Iodides
pvap	0.06	kPa	288.15	Vapor Pressure of Selected Organic Iodides
pvap	0.06	kPa	288.15	Vapor Pressure of Selected Organic Iodides
pvap	0.09	kPa	293.15	Vapor Pressure of Selected Organic Iodides
pvap	0.09	kPa	293.15	Vapor Pressure of Selected Organic Iodides
pvap	0.04	kPa	283.15	Vapor Pressure of Selected Organic Iodides
pvap	0.13	kPa	298.15	Vapor Pressure of Selected Organic Iodides
pvap	0.17	kPa	303.15	Vapor Pressure of Selected Organic Iodides

pvap	0.17	kPa	303.15	Vapor Pressure of Selected Organic Iodides
pvap	0.24	kPa	308.16	Vapor Pressure of Selected Organic Iodides
pvap	0.24	kPa	308.16	Vapor Pressure of Selected Organic Iodides
pvap	0.24	kPa	308.16	Vapor Pressure of Selected Organic Iodides
pvap	0.04	kPa	283.15	Vapor Pressure of Selected Organic Iodides
pvap	0.03	kPa	278.15	Vapor Pressure of Selected Organic Iodides
pvap	0.03	kPa	278.15	Vapor Pressure of Selected Organic Iodides
pvap	0.02	kPa	273.65	Vapor Pressure of Selected Organic Iodides
pvap	0.02	kPa	273.65	Vapor Pressure of Selected Organic Iodides
pvap	0.01	kPa	268.17	Vapor Pressure of Selected Organic Iodides
pvap	0.01	kPa	268.17	Vapor Pressure of Selected Organic Iodides
pvap	0.01	kPa	268.17	Vapor Pressure of Selected Organic Iodides
pvap	8.29e-03	kPa	263.17	Vapor Pressure of Selected Organic Iodides
pvap	8.29e-03	kPa	263.17	Vapor Pressure of Selected Organic Iodides
pvap	5.25e-03	kPa	258.17	Vapor Pressure of Selected Organic Iodides
pvap	5.27e-03	kPa	258.17	Vapor Pressure of Selected Organic Iodides
pvap	5.26e-03	kPa	258.17	Vapor Pressure of Selected Organic Iodides
pvap	8.30e-03	kPa	263.17	Vapor Pressure of Selected Organic Iodides

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	353.70	K	2.70	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C626620&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Vapor Pressure of Selected Organic Iodides:	https://www.doi.org/10.1021/je100398m
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

chl:	Standard liquid enthalpy of combustion
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
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point

vc: Critical Volume