

1H-Indene, 2,3,4,7-tetrahydro-

Other names:	2,3,4,7-Tetrahydro-1H-indene Bicyclo[4.3.0]nona-1(6),3-diene 4,7-Dihydroindan Indan, 4,7-dihydro- Bicyclo[4.3.0]nona-3,6(1)-diene
Inchi:	InChI=1S/C9H12/c1-2-5-9-7-3-6-8(9)4-1/h1-2H,3-7H2
InchiKey:	PJEOOBRBALZZSL-UHFFFAOYSA-N
Formula:	C9H12
SMILES:	C1=CCC2=C(C1)CCC2
Mol. weight [g/mol]:	120.19
CAS:	7603-37-4

Physical Properties

Property code	Value	Unit	Source
gf	166.18	kJ/mol	Joback Method
hf	31.33	kJ/mol	Joback Method
hfus	8.56	kJ/mol	Joback Method
hvap	38.50	kJ/mol	Joback Method
log10ws	-3.09		Crippen Method
logp	2.817		Crippen Method
mcvol	107.350	ml/mol	McGowan Method
pc	3722.56	kPa	Joback Method
rinpol	1038.00		NIST Webbook
rinpol	1040.00		NIST Webbook
rinpol	1047.00		NIST Webbook
rinpol	1039.00		NIST Webbook
rinpol	1059.00		NIST Webbook
rinpol	1068.00		NIST Webbook
rinpol	1048.00		NIST Webbook
rinpol	1038.00		NIST Webbook
rinpol	1038.00		NIST Webbook
rinpol	1038.00		NIST Webbook
rinpol	1056.60		NIST Webbook
rinpol	1066.40		NIST Webbook
rinpol	1031.50		NIST Webbook
rinpol	1037.50		NIST Webbook
rinpol	1039.00		NIST Webbook

rinpol	1047.00		NIST Webbook
tb	451.20	K	NIST Webbook
tc	673.86	K	Joback Method
tf	251.55	K	Joback Method
vc	0.404	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	214.59	J/molxK	449.23	Joback Method
cpg	230.54	J/molxK	486.67	Joback Method
cpg	245.37	J/molxK	524.11	Joback Method
cpg	259.17	J/molxK	561.55	Joback Method
cpg	271.98	J/molxK	598.98	Joback Method
cpg	283.89	J/molxK	636.42	Joback Method
cpg	294.96	J/molxK	673.86	Joback Method
dvisc	0.0021633	Paxs	251.55	Joback Method
dvisc	0.0013856	Paxs	284.50	Joback Method
dvisc	0.0009735	Paxs	317.44	Joback Method
dvisc	0.0007309	Paxs	350.39	Joback Method
dvisc	0.0005765	Paxs	383.34	Joback Method
dvisc	0.0004721	Paxs	416.28	Joback Method
dvisc	0.0003981	Paxs	449.23	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C7603374&Units=SI

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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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