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	1066.40		NIST Webbook
rinpol	1038.00		NIST Webbook
rinpol	1047.00		NIST Webbook
rinpol	1039.00		NIST Webbook
rinpol	1037.50		NIST Webbook
rinpol	1031.50		NIST Webbook
rinpol	1038.00		NIST Webbook
rinpol	1056.60		NIST Webbook
rinpol	1048.00		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	1038.00		NIST Webbook

rinpol	1038.00		NIST Webbook
tb	451.20	K	NIST Webbook
tc	673.86	K	Joback Method
tf	251.55	K	Joback Method
vc	0.404	m3/kmol	Joback Method

Temperature Dependent Properties

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

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

Latest version available from:

https://www.chemeo.com/cid/64-742-7/1H-Indene-2-3-4-7-tetrahydro.pdf

Generated by Cheméo on 2024-10-12 03:42:01.21079962 +0000 UTC m=+3285383.847768868.

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