1H-Indene, 2,3-dihydro-5-methyl-

Other names:	2,3-dihydro-5-methyl-1H-indene
	2,3-dihydro-5-methylindene
	5-Methylindan
	5-Methylindane
	5-methy1-2,3-dihydro-1H-indene
	Indan, 5-methyl-
	Indane, 5-methyl
Inchi:	InChI=1S/C10H12/c1-8-5-6-9-3-2-4-10(9)7-8/h5-7H,2-4H2,1H3
InchiKey:	RFXBCGVZEJEYGG-UHFFFAOYSA-N
Formula:	C10H12
SMILES:	Cc1ccc2c(c1)CCC2
Mol. weight [g/mol]:	132.20
CAS:	874-35-1

Physical Properties

Property code	Value	Unit	Source
gf	194.93	kJ/mol	Joback Method
hf	57.00	kJ/mol	Joback Method
hfus	11.98	kJ/mol	Joback Method
hvap	41.68	kJ/mol	Joback Method
log10ws	-3.03		Crippen Method
logp	2.484		Crippen Method
mcvol	117.140	ml/mol	McGowan Method
pc	3403.91	kPa	Joback Method
rinpol	1112.20		NIST Webbook
rinpol	1121.00		NIST Webbook
rinpol	1127.35		NIST Webbook
rinpol	1137.10		NIST Webbook
rinpol	1135.10		NIST Webbook
rinpol	1131.10		NIST Webbook
rinpol	1137.10		NIST Webbook
rinpol	1139.90		NIST Webbook
rinpol	1131.10		NIST Webbook
rinpol	1137.10		NIST Webbook
rinpol	1139.90		NIST Webbook
rinpol	1137.10		NIST Webbook
rinpol	1135.10		NIST Webbook

rinpol	1120.99		NIST Webbook
rinpol	1122.37		NIST Webbook
rinpol	1122.00		NIST Webbook
rinpol	1119.00		NIST Webbook
rinpol	1112.54		NIST Webbook
rinpol	1118.91		NIST Webbook
rinpol	1123.00		NIST Webbook
rinpol	1135.50		NIST Webbook
rinpol	1142.55		NIST Webbook
rinpol	1147.03		NIST Webbook
rinpol	1133.00		NIST Webbook
rinpol	1139.00		NIST Webbook
rinpol	1147.00		NIST Webbook
rinpol	1152.00		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1121.00		NIST Webbook
rinpol	1138.50		NIST Webbook
rinpol	1136.20		NIST Webbook
rinpol	1119.00		NIST Webbook
rinpol	1124.00		NIST Webbook
ripol	1446.90		NIST Webbook
ripol	1480.00		NIST Webbook
ripol	1447.00		NIST Webbook
ripol	1480.00		NIST Webbook
tb	476.25	K	Joback Method
tc	701.15	K	Joback Method
tf	276.10	K	Joback Method
vc	0.446	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.43	J/mol×K	476.25	Joback Method
cpg	308.20	J/mol×K	663.67	Joback Method
cpg	296.85	J/mol×K	626.18	Joback Method
cpg	284.66	J/mol×K	588.70	Joback Method
cpg	271.57	J/mol×K	551.22	Joback Method
cpg	257.52	J/mol×K	513.73	Joback Method
cpg	318.79	J/mol×K	701.15	Joback Method
dvisc	0.0003783	Pa×s	476.25	Joback Method
dvisc	0.0004372	Pa×s	442.89	Joback Method

dvisc	0.0005173	Pa×s	409.53	Joback Method
dvisc	0.0006306	Pa×s	376.18	Joback Method
dvisc	0.0007990	Pa×s	342.82	Joback Method
dvisc	0.0010653	Pa×s	309.46	Joback Method
dvisc	0.0015225	Pa×s	276.10	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	355.20	K	2.30	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.33850e+01
Coeff. B	-3.57065e+03
Coeff. C	-7.00000e+01
Temperature range (K), min.	342.62
Temperature range (K), max.	512.27

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

KDB: https://www.cheric.org/files/research/kdb/mol/mol758.mol

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C874351&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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
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