Indan, 1-methyl-

Other names:	1-Methyl-2,3-dihydroindene
	1-Methylindan
	1-Methylindane
	1H-Indene, 2,3-dihydro-1-methyl-
	2,3-Dihydro-1-methyl-1H-indene
Inchi:	InChI=1S/C10H12/c1-8-6-7-9-4-2-3-5-10(8)9/h2-5,8H,6-7H2,1H3
InchiKey:	FIPKSKMDTAQBDJ-UHFFFAOYSA-N
Formula:	C10H12
SMILES:	CC1CCc2ccccc21
Mol. weight [g/mol]:	132.20
CAS:	767-58-8

Physical Properties

Property code	Value	Unit	Source
gf	196.85	kJ/mol	Joback Method
hf	48.13	kJ/mol	Joback Method
hfus	13.44	kJ/mol	Joback Method
hvap	40.70	kJ/mol	Joback Method
ie	8.47	eV	NIST Webbook
ie	8.47	eV	NIST Webbook
log10ws	-2.94		Crippen Method
logp	2.736		Crippen Method
mcvol	117.140	ml/mol	McGowan Method
pc	3333.53	kPa	Joback Method
rinpol	1087.10		NIST Webbook
rinpol	1067.00		NIST Webbook
rinpol	1078.00		NIST Webbook
rinpol	1077.00		NIST Webbook
rinpol	1077.00		NIST Webbook
rinpol	1087.10		NIST Webbook
rinpol	1084.80		NIST Webbook
rinpol	1067.00		NIST Webbook
rinpol	1061.00		NIST Webbook
rinpol	1084.80		NIST Webbook
rinpol	1063.00		NIST Webbook
rinpol	1079.30		NIST Webbook
rinpol	1065.00		NIST Webbook

rinpol	1079.30		NIST Webbook
rinpol	1065.00		NIST Webbook
ripol	1408.00		NIST Webbook
tb	466.60	K	Joback Method
tc	689.90	K	Joback Method
tf	259.34	K	Joback Method
vc	0.445	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.54	J/mol×K	466.60	Joback Method
cpg	312.26	J/mol×K	652.68	Joback Method
cpg	300.22	J/mol×K	615.47	Joback Method
cpg	287.30	J/mol×K	578.25	Joback Method
cpg	273.42	J/mol×K	541.03	Joback Method
cpg	258.52	J/mol×K	503.82	Joback Method
cpg	323.47	J/mol×K	689.90	Joback Method
dvisc	0.0003992	Pa×s	466.60	Joback Method
dvisc	0.0004515	Pa×s	432.06	Joback Method
dvisc	0.0005217	Pa×s	397.51	Joback Method
dvisc	0.0006195	Pa×s	362.97	Joback Method
dvisc	0.0007629	Pa×s	328.43	Joback Method
dvisc	0.0009866	Pa×s	293.88	Joback Method
dvisc	0.0013663	Pa×s	259.34	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.14768e+01
Coeff. B	-2.79342e+03
Coeff. C	-7.00000e+01
Temperature range (K), min.	319.65
Temperature range (K), max.	523.09

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C767588&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/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/research/kdb/hcprop/showprop.php?cmpid=755

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
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume