

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

Other names:	2,3-Dihydro-2-methyl-1H-indene 2-Methylindan 2-Methylindane Indan, 2-methyl- «beta»-Methylindan Â«betaÂ»-Methylindan
Inchi:	InChI=1S/C10H12/c1-8-6-9-4-2-3-5-10(9)7-8/h2-5,8H,6-7H2,1H3
InchiKey:	MWGYLUXMIMSOTM-UHFFFAOYSA-N
Formula:	C10H12
SMILES:	CC1Cc2ccccc2C1
Mol. weight [g/mol]:	132.20
CAS:	824-63-5

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
log10ws	-2.73		Crippen Method
logp	2.421		Crippen Method
mcvol	117.140	ml/mol	McGowan Method
pc	3333.53	kPa	Joback Method
rinpol	1084.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1089.00		NIST Webbook
rinpol	1074.30		NIST Webbook
rinpol	1079.50		NIST Webbook
rinpol	1082.00		NIST Webbook
rinpol	1074.30		NIST Webbook
rinpol	1081.00		NIST Webbook
rinpol	1082.00		NIST Webbook
rinpol	1049.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1084.00		NIST Webbook
rinpol	1081.00		NIST Webbook
rinpol	1098.00		NIST Webbook

rinpol	1096.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1086.00		NIST Webbook
rinpol	1080.00		NIST Webbook
rinpol	1079.50		NIST Webbook
tb	466.60	K	Joback Method
tc	689.90	K	Joback Method
tf	259.34	K	Joback Method
vc	0.445	m ³ /kmol	Joback Method

Temperature Dependent Properties

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

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.21414e+01
Coeff. B	-3.06413e+03
Coeff. C	-7.00000e+01
Temperature range (K), min.	328.49
Temperature range (K), max.	518.63

Sources

KDB:	https://www.chemic.org/files/research/kdb/mol/mol756.mol
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C824635&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/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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

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