

1H-Indene, 2,3-dihydro-4-methyl-

Other names:	2,3-dihydro-4-methyl-1H-indene 4-Methylindan 4-Methylindane 4-methyl-2,3-dihydro-1H-indene Indan, 4-methyl-
Inchi:	InChI=1S/C10H12/c1-8-4-2-5-9-6-3-7-10(8)9/h2,4-5H,3,6-7H2,1H3
InchiKey:	LNNSODHYZXCEJP-UHFFFAOYSA-N
Formula:	C10H12
SMILES:	Cc1cccc2c1CCC2
Mol. weight [g/mol]:	132.20
CAS:	824-22-6

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	1130.00		NIST Webbook
rinpol	1157.00		NIST Webbook
rinpol	1151.00		NIST Webbook
rinpol	1146.00		NIST Webbook
rinpol	1142.00		NIST Webbook
rinpol	1138.00		NIST Webbook
rinpol	1144.00		NIST Webbook
rinpol	1120.60		NIST Webbook
rinpol	1130.00		NIST Webbook
rinpol	1121.00		NIST Webbook
rinpol	1126.00		NIST Webbook
rinpol	1133.65		NIST Webbook
rinpol	1141.60		NIST Webbook
rinpol	1147.70		NIST Webbook
rinpol	1151.40		NIST Webbook

rinpol	1141.60		NIST Webbook
rinpol	1147.70		NIST Webbook
rinpol	1151.40		NIST Webbook
rinpol	1122.00		NIST Webbook
ripol	1468.00		NIST Webbook
ripol	1506.00		NIST Webbook
ripol	1467.90		NIST Webbook
ripol	1468.00		NIST Webbook
tb	476.25	K	Joback Method
tc	701.15	K	Joback Method
tf	276.10	K	Joback Method
vc	0.446	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.43	J/molxK	476.25	Joback Method
cpg	308.20	J/molxK	663.67	Joback Method
cpg	296.85	J/molxK	626.18	Joback Method
cpg	284.66	J/molxK	588.70	Joback Method
cpg	271.57	J/molxK	551.22	Joback Method
cpg	257.52	J/molxK	513.73	Joback Method
cpg	318.79	J/molxK	701.15	Joback Method
dvisc	0.0003783	Paxs	476.25	Joback Method
dvisc	0.0004372	Paxs	442.89	Joback Method
dvisc	0.0005173	Paxs	409.53	Joback Method
dvisc	0.0006306	Paxs	376.18	Joback Method
dvisc	0.0007990	Paxs	342.82	Joback Method
dvisc	0.0010653	Paxs	309.46	Joback Method
dvisc	0.0015225	Paxs	276.10	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.41478e+01
Coeff. B	-3.88133e+03

Coeff. C	-7.00000e+01
Temperature range (K), min.	350.03
Temperature range (K), max.	509.25

Sources

KDB:	https://www.thermochimica.org/files/research/kdb/mol/mol757.mol
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C824226&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.chemed.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
mccvol:	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

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