

Dicyclopentadiene, exo

Inchi:	InChI=1S/C10H12/c1-2-9-7-4-5-8(6-7)10(9)3-1/h1-2,4-5,7-10H,3,6H2/t7-,8+,9+,10-/m1/s
InchiKey:	HECLRDQVFMWTQS-XFWSIPNHSA-N
Formula:	C10H12
SMILES:	C1=CC2C3C=CC(C3)C2C1
Mol. weight [g/mol]:	132.20

Physical Properties

Property code	Value	Unit	Source
gf	255.68	kJ/mol	Joback Method
hf	57.73	kJ/mol	Joback Method
hfus	17.48	kJ/mol	Joback Method
hvap	38.04	kJ/mol	Joback Method
log10ws	-2.43		Crippen Method
logp	2.385		Crippen Method
mcvol	110.580	ml/mol	McGowan Method
pc	3364.54	kPa	Joback Method
rinpol	1003.30		NIST Webbook
rinpol	986.00		NIST Webbook
rinpol	984.00		NIST Webbook
rinpol	1015.00		NIST Webbook
rinpol	1007.00		NIST Webbook
rinpol	1007.00		NIST Webbook
rinpol	996.60		NIST Webbook
rinpol	1032.80		NIST Webbook
rinpol	1022.40		NIST Webbook
tb	446.34	K	Joback Method
tc	664.47	K	Joback Method
tf	250.04	K	Joback Method
vc	0.429	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.89	J/molxK	446.34	Joback Method

cpg	322.43	J/molxK	628.12	Joback Method
cpg	308.96	J/molxK	591.76	Joback Method
cpg	294.37	J/molxK	555.41	Joback Method
cpg	278.56	J/molxK	519.05	Joback Method
cpg	261.44	J/molxK	482.70	Joback Method
cpg	334.89	J/molxK	664.47	Joback Method
dvisc	0.0010224	Paxs	446.34	Joback Method
dvisc	0.0009322	Paxs	413.62	Joback Method
dvisc	0.0008365	Paxs	380.91	Joback Method
dvisc	0.0007356	Paxs	348.19	Joback Method
dvisc	0.0006298	Paxs	315.47	Joback Method
dvisc	0.0005202	Paxs	282.76	Joback Method
dvisc	0.0004087	Paxs	250.04	Joback Method

Sources

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=R297191&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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