

Dicyclopentadiene, 3,8-dimethyl

Inchi:	InChI=1S/C12H16/c1-7-3-4-10-11-6-9(12(7)10)5-8(11)2/h3,5,9-12H,4,6H2,1-2H3/t9-,10?
InchiKey:	XHZMIWJGOBUCCL-QTAHKJALSA-N
Formula:	C12H16
SMILES:	CC1=CC2CC1C1CC=C(C)C21
Mol. weight [g/mol]:	160.26

Physical Properties

Property code	Value	Unit	Source
gf	253.26	kJ/mol	Joback Method
hf	-6.49	kJ/mol	Joback Method
hfus	21.88	kJ/mol	Joback Method
hvap	43.82	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	3.165		Crippen Method
mcvol	138.760	ml/mol	McGowan Method
pc	2640.67	kPa	Joback Method
rinpola	1142.00		NIST Webbook
rinpola	1142.00		NIST Webbook
tb	502.06	K	Joback Method
tc	716.34	K	Joback Method
tf	297.62	K	Joback Method
vc	0.541	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.26	J/molxK	502.06	Joback Method
cpg	418.78	J/molxK	680.63	Joback Method
cpg	404.44	J/molxK	644.91	Joback Method
cpg	389.11	J/molxK	609.20	Joback Method
cpg	372.70	J/molxK	573.49	Joback Method
cpg	355.11	J/molxK	537.77	Joback Method
cpg	432.21	J/molxK	716.34	Joback Method
dvisc	0.0013567	Paxs	502.06	Joback Method

dvisc	0.0012737	Paxs	467.99	Joback Method
dvisc	0.0011839	Paxs	433.91	Joback Method
dvisc	0.0010869	Paxs	399.84	Joback Method
dvisc	0.0009820	Paxs	365.77	Joback Method
dvisc	0.0008690	Paxs	331.69	Joback Method
dvisc	0.0007477	Paxs	297.62	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
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=R531778&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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