

1,3-Cyclopentadiene, 2-decyl

Inchi:	InChI=1S/C15H26/c1-2-3-4-5-6-7-8-9-12-15-13-10-11-14-15/h10,13-14H,2-9,11-12H2,1H
InchiKey:	AVJOYDXHWFUFCL-UHFFFAOYSA-N
Formula:	C15H26
SMILES:	CCCCCCCCC1=CCC=C1
Mol. weight [g/mol]:	206.37

Physical Properties

Property code	Value	Unit	Source
gf	169.97	kJ/mol	Joback Method
hf	-168.02	kJ/mol	Joback Method
hfus	29.53	kJ/mol	Joback Method
hvap	50.80	kJ/mol	Joback Method
log10ws	-5.70		Crippen Method
logp	5.404		Crippen Method
mvol	202.750	ml/mol	McGowan Method
pc	1753.60	kPa	Joback Method
rinpol	1506.00		NIST Webbook
tb	565.85	K	Joback Method
tc	749.86	K	Joback Method
tf	287.99	K	Joback Method
vc	0.789	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	510.68	J/mol×K	565.85	Joback Method
cpg	529.42	J/mol×K	596.52	Joback Method
cpg	547.24	J/mol×K	627.19	Joback Method
cpg	564.17	J/mol×K	657.86	Joback Method
cpg	580.26	J/mol×K	688.52	Joback Method
cpg	595.53	J/mol×K	719.19	Joback Method
cpg	610.03	J/mol×K	749.86	Joback Method
dvisc	0.0033987	Paxs	287.99	Joback Method
dvisc	0.0015452	Paxs	334.30	Joback Method

dvisc	0.0008511	Paxs	380.61	Joback Method
dvisc	0.0005335	Paxs	426.92	Joback Method
dvisc	0.0003665	Paxs	473.23	Joback Method
dvisc	0.0002691	Paxs	519.54	Joback Method
dvisc	0.0002079	Paxs	565.85	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R40813&Units=SI
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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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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