

Beta-tetrahydro-tri-cyclopentadiene

Inchi:	InChI=1S/C15H22/c1-2-10-11(3-1)13-7-12(10)14-8-4-5-9(6-8)15(13)14/h8-15H,1-7H2
InchiKey:	SUUFUDGKCFRARM-UHFFFAOYSA-N
Formula:	C15H22
SMILES:	C1CC2C(C1)C1CC2C2C3CCC(C3)C12
Mol. weight [g/mol]:	202.34
CAS:	75172-85-9

Physical Properties

Property code	Value	Unit	Source
chs	-8920.30	kJ/mol	NIST Webbook
gf	356.04	kJ/mol	Joback Method
hf	-49.95	kJ/mol	Joback Method
hfus	28.49	kJ/mol	Joback Method
hvap	47.62	kJ/mol	Joback Method
log10ws	-3.64		Crippen Method
logp	3.715		Crippen Method
mcvol	167.910	ml/mol	McGowan Method
pc	2252.53	kPa	Joback Method
tb	562.29	K	Joback Method
tc	783.52	K	Joback Method
tf	335.79	K	Joback Method
vc	0.657	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	495.75	J/molxK	562.29	Joback Method
cpg	604.97	J/molxK	746.65	Joback Method
cpg	586.16	J/molxK	709.78	Joback Method
cpg	566.01	J/molxK	672.91	Joback Method
cpg	544.34	J/molxK	636.03	Joback Method
cpg	520.98	J/molxK	599.16	Joback Method
cpg	622.62	J/molxK	783.52	Joback Method
dvisc	0.0133727	Paxs	562.29	Joback Method

dvisc	0.0108972	Paxs	524.54	Joback Method
dvisc	0.0086024	Paxs	486.79	Joback Method
dvisc	0.0065262	Paxs	449.04	Joback Method
dvisc	0.0047063	Paxs	411.29	Joback Method
dvisc	0.0031769	Paxs	373.54	Joback Method
dvisc	0.0019631	Paxs	335.79	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C75172859&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

Legend

chs:	Standard solid enthalpy of combustion
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
mvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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