

(3a«alpha»,4«alpha»,7«alpha»,7a«alpha»)-octahydro

Other names:	endo tetrahydrodicyclopentadiene
Inchi:	InChI=1S/C14H24/c1-11-8-9-12(2,10-11)14(4)7-5-6-13(11,14)3/h5-10H2,1-4H3/t11-,12+,
InchiKey:	HFDBLHGEKMWGRC-KPWCQOUSA-N
Formula:	C10H16
SMILES:	CC12CCC(C)(C1)C1(C)CCCC21C
Mol. weight [g/mol]:	136.23
CAS:	2825-83-4

Physical Properties

Property code	Value	Unit	Source
gf	207.48	kJ/mol	Joback Method
hf	-79.43	kJ/mol	Joback Method
hfus	0.20	kJ/mol	Joback Method
hvap	41.76	kJ/mol	Joback Method
log10ws	-4.40		Crippen Method
logp	4.393		Crippen Method
mcvol	175.540	ml/mol	McGowan Method
pc	2500.00	kPa	Joback Method
tb	540.50	K	Joback Method
tc	777.93	K	Joback Method
tf	389.20	K	Joback Method
vc	0.673	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	565.47	J/mol×K	738.36	Joback Method
cpg	466.97	J/mol×K	540.50	Joback Method
cpg	489.65	J/mol×K	580.07	Joback Method
cpg	510.26	J/mol×K	619.64	Joback Method
cpg	529.37	J/mol×K	659.21	Joback Method
cpg	547.57	J/mol×K	698.78	Joback Method
cpg	583.64	J/mol×K	777.93	Joback Method
hfust	3.48	kJ/mol	356.80	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=C2825834&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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