Bicyclo[5.3.0]decane, 2-methylene-5-(1-methylvinyl)-8-methyl-

Other names: 2-methylene-5-(1-methylvinyl)-8-methylbicyclo[5.3.0]decane

Inchi: InChI=1S/C15H24/c1-10(2)13-7-5-11(3)14-8-6-12(4)15(14)9-13/h12-15H,1,3,5-9H2,2,4H

InchiKey: XPMNUVZBXVZTSW-UHFFFAOYSA-N

Formula: C15H24

SMILES: C=C(C)C1CCC(=C)C2CCC(C)C2C1

Mol. weight [g/mol]: 204.35

Physical Properties

Property code	Value	Unit	Source
gf	265.47	kJ/mol	Joback Method
hf	-72.77	kJ/mol	Joback Method
hfus	20.87	kJ/mol	Joback Method
hvap	48.45	kJ/mol	Joback Method
log10ws	-4.63		Crippen Method
logp	4.581		Crippen Method
mcvol	191.890	ml/mol	McGowan Method
pc	1893.65	kPa	Joback Method
tb	559.54	K	Joback Method
tc	774.32	K	Joback Method
tf	270.09	K	Joback Method
vc	0.722	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	499.46	J/mol×K	559.54	Joback Method
cpg	523.74	J/mol×K	595.34	Joback Method
cpg	546.61	J/mol×K	631.13	Joback Method
cpg	568.13	J/mol×K	666.93	Joback Method
cpg	588.34	J/mol×K	702.73	Joback Method
cpg	607.30	J/mol×K	738.53	Joback Method
cpg	625.06	J/mol×K	774.32	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=U159393&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
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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