

3-methyl-3-butenyl cyclopentane

Inchi:	InChI=1S/C10H18/c1-9(2)7-8-10-5-3-4-6-10/h10H,1,3-8H2,2H3
InchiKey:	NOZPYOWDBPOYFY-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	C=C(C)CCC1CCCC1
Mol. weight [g/mol]:	138.25

Physical Properties

Property code	Value	Unit	Source
gf	149.16	kJ/mol	Joback Method
hf	-73.61	kJ/mol	Joback Method
hfus	13.00	kJ/mol	Joback Method
hvap	37.52	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.533		Crippen Method
mvol	136.600	ml/mol	McGowan Method
pc	2627.15	kPa	Joback Method
rinpol	1028.00		NIST Webbook
rinpol	1028.00		NIST Webbook
tb	440.04	K	Joback Method
tc	637.28	K	Joback Method
tf	197.64	K	Joback Method
vc	0.518	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	283.37	J/mol×K	440.04	Joback Method
cpg	301.62	J/mol×K	472.91	Joback Method
cpg	318.93	J/mol×K	505.79	Joback Method
cpg	335.34	J/mol×K	538.66	Joback Method
cpg	350.87	J/mol×K	571.53	Joback Method
cpg	365.56	J/mol×K	604.41	Joback Method
cpg	379.45	J/mol×K	637.28	Joback Method

Sources

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=R282827&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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