Methyl-2 decadiene-1,9

Other names: 1,9-Decadiene, 2-methyl
Inchi: InChI=1S/C11H20/c1-4-5-6-7-8-9-10-11(2)3/h4H,1-2,5-10H2,3H3
InchiKey: ITTZSPMZRBKRGK-UHFFFAOYSA-N
Formula: C11H20
SMILES: C=CCCCCCCC(=C)C
Mol. weight [g/mol]: 152.28

Physical Properties

Property code	Value	Unit	Source
gf	208.87	kJ/mol	Joback Method
hf	-29.30	kJ/mol	Joback Method
hfus	20.38	kJ/mol	Joback Method
hvap	38.82	kJ/mol	Joback Method
log10ws	-4.13		Crippen Method
logp	4.089		Crippen Method
mcvol	157.250	ml/mol	McGowan Method
pc	2094.58	kPa	Joback Method
rinpol	1085.00		NIST Webbook
rinpol	1057.00		NIST Webbook
rinpol	1108.00		NIST Webbook
rinpol	1108.00		NIST Webbook
ripol	1253.00		NIST Webbook
ripol	1253.00		NIST Webbook
ripol	1236.00		NIST Webbook
tb	444.32	K	Joback Method
tc	615.35	K	Joback Method
tf	196.25	K	Joback Method
vc	0.615	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	326.19	J/mol×K	444.32	Joback Method
cpg	341.47	J/mol×K	472.82	Joback Method

cpg	356.11	J/mol×K	501.33	Joback Method
cpg	370.11	J/mol×K	529.83	Joback Method
cpg	383.51	J/mol×K	558.34	Joback Method
cpg	396.32	J/mol×K	586.84	Joback Method
cpg	408.56	J/mol×K	615.35	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R1971&Units=SI
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

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