dimethyl-3,9 undecadiene-1,10

Inchi: InChI=1S/C13H24/c1-5-12(3)10-8-7-9-11-13(4)6-2/h5-6,12-13H,1-2,7-11H2,3-4H3
InchiKey: MBACLXYJQAFRPD-UHFFFAOYSA-N
Formula: C13H24
SMILES: C=CC(C)CCCCCC(C)C=C
Mol. weight [g/mol]: 180.33

Physical Properties

Property code	Value	Unit	Source
gf	229.38	kJ/mol	Joback Method
hf	-71.35	kJ/mol	Joback Method
hfus	19.82	kJ/mol	Joback Method
hvap	42.42	kJ/mol	Joback Method
log10ws	-4.49		Crippen Method
logp	4.581		Crippen Method
mcvol	185.430	ml/mol	McGowan Method
pc	1786.37	kPa	Joback Method
rinpol	1195.00		NIST Webbook
ripol	1345.00		NIST Webbook
tb	489.32	K	Joback Method
tc	661.97	K	Joback Method
tf	202.75	K	Joback Method
vc	0.714	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	418.76	J/mol×K	489.32	Joback Method
cpg	436.16	J/mol×K	518.09	Joback Method
cpg	452.79	J/mol×K	546.87	Joback Method
cpg	468.69	J/mol×K	575.64	Joback Method
cpg	483.88	J/mol×K	604.42	Joback Method
cpg	498.38	J/mol×K	633.19	Joback Method
cpg	512.22	J/mol×K	661.97	Joback Method
dvisc	0.0131762	Pa×s	202.75	Joback Method

dvisc	0.0032767	Pa×s	250.51	Joback Method
dvisc	0.0012724	Pa×s	298.27	Joback Method
dvisc	0.0006416	Pa×s	346.04	Joback Method
dvisc	0.0003819	Pa×s	393.80	Joback Method
dvisc	0.0002544	Pa×s	441.56	Joback Method
dvisc	0.0001834	Pa×s	489.32	Joback Method

Sources

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=R242547&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

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
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