1,9-Decadiene, 4-methyl

Inchi: InChI=1S/C11H20/c1-4-6-7-8-10-11(3)9-5-2/h4-5,11H,1-2,6-10H2,3H3
InchiKey: JUNUUVWAJZEHTI-UHFFFAOYSA-N
Formula: C11H20
SMILES: C=CCCCCC(C)CC=C
Mol. weight [g/mol]: 152.28

Physical Properties

Property code	Value	Unit	Source
gf	214.98	kJ/mol	Joback Method
hf	-24.79	kJ/mol	Joback Method
hfus	18.16	kJ/mol	Joback Method
hvap	38.35	kJ/mol	Joback Method
log10ws	-3.89		Crippen Method
logp	3.945		Crippen Method
mcvol	157.250	ml/mol	McGowan Method
pc	2100.34	kPa	Joback Method
rinpol	1025.00		NIST Webbook
rinpol	1025.00		NIST Webbook
tb	444.00	K	Joback Method
tc	615.59	K	Joback Method
tf	195.21	K	Joback Method
vc	0.608	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	326.31	J/mol×K	444.00	Joback Method
cpg	397.14	J/mol×K	586.99	Joback Method
cpg	384.21	J/mol×K	558.39	Joback Method
cpg	370.68	J/mol×K	529.79	Joback Method
cpg	356.54	J/mol×K	501.20	Joback Method
cpg	341.75	J/mol×K	472.60	Joback Method
cpg	409.49	J/mol×K	615.59	Joback Method
dvisc	0.0002157	Pa×s	444.00	Joback Method

dvisc	0.0002885	Pa×s	402.53	Joback Method
dvisc	0.0004126	Pa×s	361.07	Joback Method
dvisc	0.0006474	Pa×s	319.61	Joback Method
dvisc	0.0011617	Pa×s	278.14	Joback Method
dvisc	0.0025590	Pa×s	236.67	Joback Method
dvisc	0.0078837	Pa×s	195.21	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R1997&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

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume