1,cis-4-nonadiene

Inchi: InChI=1S/C9H16/c1-3-5-7-9-8-6-4-2/h3,7,9H,1,4-6,8H2,2H3/b9-7-
InchiKey: ZHDCVEXTJJYIGZ-CLFYSBASSA-N
Formula: C9H16
SMILES: C=CCC=CCCCC
Mol. weight [g/mol]: 124.22

Physical Properties

Property code	Value	Unit	Source
gf	192.96	kJ/mol	Joback Method
hf	13.56	kJ/mol	Joback Method
hfus	17.99	kJ/mol	Joback Method
hvap	34.92	kJ/mol	Joback Method
log10ws	-3.30		Crippen Method
logp	3.309		Crippen Method
mcvol	129.070	ml/mol	McGowan Method
pc	2530.27	kPa	Joback Method
rinpol	868.10		NIST Webbook
tb	406.16	K	Joback Method
tc	580.81	K	Joback Method
tf	184.35	K	Joback Method
vc	0.500	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.68	J/mol×K	406.16	Joback Method
cpg	304.08	J/mol×K	551.71	Joback Method
cpg	292.93	J/mol×K	522.60	Joback Method
cpg	281.24	J/mol×K	493.49	Joback Method
cpg	268.99	J/mol×K	464.38	Joback Method
cpg	256.14	J/mol×K	435.27	Joback Method
cpg	314.71	J/mol×K	580.81	Joback Method
dvisc	0.0001978	Pa×s	406.16	Joback Method
dvisc	0.0002575	Pa×s	369.19	Joback Method

dvisc	0.0003554	Pa×s	332.22	Joback Method
dvisc	0.0005317	Pa×s	295.25	Joback Method
dvisc	0.0008927	Pa×s	258.29	Joback Method
dvisc	0.0017822	Pa×s	221.32	Joback Method
dvisc	0.0046945	Pa×s	184.35	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=R249573&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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