(Z)-5,5-Dimethyl-1,3-hexadiene

Inchi: InChI=1S/C8H14/c1-5-6-7-8(2,3)4/h5-7H,1H2,2-4H3/b7-6-
InchiKey: YKCQGTKPNABNLF-SREVYHEPSA-N
Formula: C8H14
SMILES: C=CC=CC(C)(C)C
Mol. weight [g/mol]: 110.20
CAS: 59697-92-6

Physical Properties

Property code	Value	Unit	Source
gf	187.38	kJ/mol	Joback Method
hf	25.45	kJ/mol	Joback Method
hfus	7.98	kJ/mol	Joback Method
hvap	31.39	kJ/mol	Joback Method
ie	8.46	eV	NIST Webbook
log10ws	-2.64		Crippen Method
logp	2.775		Crippen Method
mcvol	114.980	ml/mol	McGowan Method
pc	2850.52	kPa	Joback Method
tb	380.05	K	Joback Method
tc	567.46	K	Joback Method
tf	175.50	K	Joback Method
vc	0.433	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	204.55	J/mol×K	380.05	Joback Method
cpg	218.53	J/mol×K	411.29	Joback Method
cpg	231.69	J/mol×K	442.52	Joback Method
cpg	244.08	J/mol×K	473.76	Joback Method
cpg	255.73	J/mol×K	504.99	Joback Method
cpg	266.69	J/mol×K	536.23	Joback Method
cpg	276.99	J/mol×K	567.46	Joback Method
dvisc	0.0091895	Pa×s	175.50	Joback Method

dvisc	0.0029792	Pa×s	209.59	Joback Method
dvisc	0.0013237	Pa×s	243.68	Joback Method
dvisc	0.0007177	Pa×s	277.77	Joback Method
dvisc	0.0004449	Pa×s	311.87	Joback Method
dvisc	0.0003030	Pa×s	345.96	Joback Method
dvisc	0.0002211	Pa×s	380.05	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C59697926&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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume