2,6-Octadiene, 2,6-dimethyl-

Other names: 2,6-Dimethyl 2,6-octadiene
Inchi: InChI=1S/C10H18/c1-5-10(4)8-6-7-9(2)3/h5,7H,6,8H2,1-4H3
InchiKey: MZPDTOMKQCMETI-UHFFFAOYSA-N
Formula: C10H18
SMILES: CC=C(C)CCC=C(C)C
Mol. weight [g/mol]: 138.25
CAS: 2792-39-4

Physical Properties

Property code	Value	Unit	Source
gf	176.66	kJ/mol	Joback Method
hf	-34.87	kJ/mol	Joback Method
hfus	19.44	kJ/mol	Joback Method
hvap	37.93	kJ/mol	Joback Method
log10ws	-3.72		Crippen Method
logp	3.699		Crippen Method
mcvol	143.160	ml/mol	McGowan Method
pc	2347.36	kPa	Joback Method
rinpol	978.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	979.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	979.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	990.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	979.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	986.00		NIST Webbook
rinpol	985.00		NIST Webbook

rinpol	986.00		NIST Webbook
rinpol	980.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	979.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	976.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	978.00		NIST Webbook
tb	436.28	K	Joback Method
tc	621.64	K	Joback Method
tf	164.38	K	Joback Method
vc	0.557	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.91	J/mol×K	436.28	Joback Method
cpg	300.18	J/mol×K	467.17	Joback Method
cpg	314.68	J/mol×K	498.07	Joback Method
cpg	328.46	J/mol×K	528.96	Joback Method
cpg	341.53	J/mol×K	559.86	Joback Method
cpg	353.94	J/mol×K	590.75	Joback Method
cpg	365.73	J/mol×K	621.64	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2792394&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
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