1,6-Octadiene, 5,7-dimethyl-, (R)-

Other names:	R(+)5,7-Dimethyl-1,6-octadiene
	5,7-Dimethyl-1,6-octadiene, (R)-
	(R)-5,7-dimethylocta-1,6-diene
Inchi:	InChI=1S/C10H18/c1-5-6-7-10(4)8-9(2)3/h5,8,10H,1,6-7H2,2-4H3/t10-/m1/s1
InchiKey:	FYZHLRMYDRUDES-SNVBAGLBSA-N
Formula:	C10H18
SMILES:	C=CCCC(C)C=C(C)C
Mol. weight [g/mol]:	138.25
CAS:	85006-04-8

Physical Properties

Property code	Value	Unit	Source
gf	190.39	kJ/mol	Joback Method
hf	-22.15	kJ/mol	Joback Method
hfus	15.74	kJ/mol	Joback Method
hvap	36.83	kJ/mol	Joback Method
log10ws	-3.47		Crippen Method
logp	3.555		Crippen Method
mcvol	143.160	ml/mol	McGowan Method
pc	2331.52	kPa	Joback Method
rinpol	917.00		NIST Webbook
rinpol	926.00		NIST Webbook
rinpol	917.00		NIST Webbook
rinpol	926.00		NIST Webbook
tb	428.48	K	Joback Method
tc	609.41	K	Joback Method
tf	166.66	K	Joback Method
vc	0.551	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.02	J/mol×K	428.48	Joback Method
cpg	299.14	J/mol×K	458.64	Joback Method

cpg	313.54	J/mol×K	488.79	Joback Method
cpg	327.26	J/mol×K	518.95	Joback Method
cpg	340.32	J/mol×K	549.10	Joback Method
cpg	352.75	J/mol×K	579.26	Joback Method
cpg	364.58	J/mol×K	609.41	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=C85006048&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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