2,6-Octadiene, 4,5-dimethyl-

Inchi: InChI=1S/C10H18/c1-5-7-9(3)10(4)8-6-2/h5-10H,1-4H3/b7-5+,8-6+
InchiKey: JASAKDWEYSDIHI-KQQUZDAGSA-N
Formula: C10H18
SMILES: CC=CC(C)C(C)C=CC
Mol. weight [g/mol]: 138.25
CAS: 18476-57-8

Physical Properties

Property code	Value	Unit	Source
gf	188.88	kJ/mol	Joback Method
hf	-25.85	kJ/mol	Joback Method
hfus	15.01	kJ/mol	Joback Method
hvap	36.99	kJ/mol	Joback Method
log10ws	-3.23		Crippen Method
logp	3.411		Crippen Method
mcvol	143.160	ml/mol	McGowan Method
pc	2361.07	kPa	Joback Method
tb	435.64	K	Joback Method
tc	622.30	K	Joback Method
tf	162.30	K	Joback Method
vc	0.543	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	285.11	J/mol×K	435.64	Joback Method
cpg	300.74	J/mol×K	466.75	Joback Method
cpg	315.57	J/mol×K	497.86	Joback Method
cpg	329.64	J/mol×K	528.97	Joback Method
cpg	342.99	J/mol×K	560.08	Joback Method
cpg	355.65	J/mol×K	591.19	Joback Method
cpg	367.65	J/mol×K	622.30	Joback Method
dvisc	0.0211674	Pa×s	162.30	Joback Method
dvisc	0.0037573	Pa×s	207.86	Joback Method

dvisc	0.0012417	Pa×s	253.41	Joback Method
dvisc	0.0005751	Pa×s	298.97	Joback Method
dvisc	0.0003265	Pa×s	344.53	Joback Method
dvisc	0.0002115	Pa×s	390.08	Joback Method
dvisc	0.0001501	Pa×s	435.64	Joback Method

Sources

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

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C18476578&Units=SI

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