trans-2,7-Dimethyl-3,6-octadien-2-ol

Other names: (3E)-2,7-Dimethyl-3,6-octadien-2-ol
3,6-Octadien-2-ol, 2,7-dimethyl, (E)
3,6-Octadien-2-ol, 2,7-dimethyl-, (3E)-
Inchi: InChI=1S/C10H18O/c1-9(2)7-5-6-8-10(3,4)11/h6-8,11H,5H2,1-4H3/b8-6+
InchiKey: HCKQHTLHJFETOD-SOFGYWHQSA-N
Formula: C10H18O
SMILES: CC(C)=CCC=CC(C)(C)O
Mol. weight [g/mol]: 154.25
CAS: 38092-33-0

Physical Properties

Property code	Value	Unit	Source
gf	51.23	kJ/mol	Joback Method
hf	-186.06	kJ/mol	Joback Method
hfus	17.42	kJ/mol	Joback Method
hvap	53.23	kJ/mol	Joback Method
log10ws	-3.09		Crippen Method
logp	2.670		Crippen Method
mcvol	149.030	ml/mol	McGowan Method
pc	2608.40	kPa	Joback Method
tb	525.35	K	Joback Method
tc	709.33	K	Joback Method
tf	241.58	K	Joback Method
vc	0.565	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	347.81	J/mol×K	525.35	Joback Method
cpg	361.29	J/mol×K	556.01	Joback Method
cpg	373.99	J/mol×K	586.68	Joback Method
cpg	385.96	J/mol×K	617.34	Joback Method
cpg	397.25	J/mol×K	648.00	Joback Method
cpg	407.90	J/mol×K	678.67	Joback Method

cpg	417.98	J/mol×K	709.33	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=C38092330&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume