M-dioxane, 2-isopropenyl-4-isopropyl-5,5-dimethyl-

Inchi: InChI=1S/C12H22O2/c1-8(2)10-12(5,6)7-13-11(14-10)9(3)4/h8,10-11H,3,7H2,1-2,4-6H3
InchiKey: MECZEGCHZVBJAN-UHFFFAOYSA-N
Formula: C12H22O2
SMILES: C=C(C)C1OCC(C)(C)C(C(C)C)O1
Mol. weight [g/mol]: 198.30
CAS: 116373-70-7

Physical Properties

Property code	Value	Unit	Source
gf	-41.69	kJ/mol	Joback Method
hf	-415.77	kJ/mol	Joback Method
hfus	24.36	kJ/mol	Joback Method
hvap	49.01	kJ/mol	Joback Method
log10ws	-3.00		Crippen Method
logp	2.986		Crippen Method
mcvol	176.520	ml/mol	McGowan Method
pc	2165.35	kPa	Joback Method
tb	534.43	K	Joback Method
tc	744.37	K	Joback Method
tf	270.22	K	Joback Method
vc	0.654	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	447.21	J/mol×K	534.43	Joback Method
cpg	467.71	J/mol×K	569.42	Joback Method
cpg	487.04	J/mol×K	604.41	Joback Method
cpg	505.30	J/mol×K	639.40	Joback Method
cpg	522.60	J/mol×K	674.39	Joback Method
cpg	539.03	J/mol×K	709.38	Joback Method
cpg	554.68	J/mol×K	744.37	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=C116373707&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