m-Toluic acid, 3-methylbut-2-enyl ester

Other names: m-toluylic acid, 3-methylbut-2-enyl ester
Inchi: InChI=1S/C13H16O2/c1-10(2)7-8-15-13(14)12-6-4-5-11(3)9-12/h4-7,9H,8H2,1-3H3
InchiKey: LFMMGLNJDLLUAW-UHFFFAOYSA-N
Formula: C13H16O2
SMILES: CC(C)=CCOC(=O)c1cccc(C)c1
Mol. weight [g/mol]: 204.26

Physical Properties

Property code	Value	Unit	Source
gf	-0.89	kJ/mol	Joback Method
hf	-223.96	kJ/mol	Joback Method
hfus	24.76	kJ/mol	Joback Method
hvap	56.66	kJ/mol	Joback Method
log10ws	-3.72		Crippen Method
logp	3.118		Crippen Method
mcvol	173.410	ml/mol	McGowan Method
pc	2386.52	kPa	Joback Method
rinpol	1607.70		NIST Webbook
tb	608.83	K	Joback Method
tc	824.83	K	Joback Method
tf	328.33	K	Joback Method
vc	0.660	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	422.38	J/mol×K	608.83	Joback Method
cpg	437.67	J/mol×K	644.83	Joback Method
cpg	452.04	J/mol×K	680.83	Joback Method
cpg	465.53	J/mol×K	716.83	Joback Method
cpg	478.17	J/mol×K	752.83	Joback Method
cpg	490.01	J/mol×K	788.83	Joback Method
cpg	501.08	J/mol×K	824.83	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=U292495&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