Ethyl 2,4,6-trimethoxycinnamate

Other names: 2-Propenoic acid, 3-(2,4,6-trimethoxyphenyl)-, ethyl ester
Inchi: InChI=1S/C14H18O5/c1-5-19-14(15)7-6-11-12(17-3)8-10(16-2)9-13(11)18-4/h6-9H,5H2,
InchiKey: NGOZXDZLACOEPS-VOTSOKGWSA-N
Formula: C14H18O5
SMILES: CCOC(=O)C=Cc1c(OC)cc(OC)cc1OC
Mol. weight [g/mol]: 266.29
CAS: 67827-53-6

Physical Properties

Property code	Value	Unit	Source
gf	-318.18	kJ/mol	Joback Method
hf	-654.41	kJ/mol	Joback Method
hfus	31.44	kJ/mol	Joback Method
hvap	67.36	kJ/mol	Joback Method
log10ws	-2.77		Crippen Method
logp	2.289		Crippen Method
mcvol	205.110	ml/mol	McGowan Method
pc	2012.70	kPa	Joback Method
tb	709.05	K	Joback Method
tc	914.01	K	Joback Method
tf	445.29	K	Joback Method
vc	0.769	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	551.07	J/mol×K	709.05	Joback Method
cpg	565.53	J/mol×K	743.21	Joback Method
cpg	579.15	J/mol×K	777.37	Joback Method
cpg	591.93	J/mol×K	811.53	Joback Method
cpg	603.84	J/mol×K	845.69	Joback Method
cpg	614.87	J/mol×K	879.85	Joback Method
cpg	625.00	J/mol×K	914.01	Joback Method
dvisc	0.0003925	Pa×s	445.29	Joback Method

dvisc	0.0002508	Pa×s	489.25	Joback Method
dvisc	0.0001726	Pa×s	533.21	Joback Method
dvisc	0.0001257	Pa×s	577.17	Joback Method
dvisc	0.0000958	Pa×s	621.13	Joback Method
dvisc	0.0000756	Pa×s	665.09	Joback Method
dvisc	0.0000615	Pa×s	709.05	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C67827536&Units=SI
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

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