ethyl p-methoxy cinnamate

Other names: (E)-Ethyl-p-methoxycinnamate
(E)-Ethyl 3-(4-methoxyphenyl)acrylate
Inchi: InChI=1S/C12H14O3/c1-3-15-12(13)9-6-10-4-7-11(14-2)8-5-10/h4-9H,3H2,1-2H3/b9-6+
InchiKey: DHNGCHLFKUPGPX-RMKNXTFCSA-N
Formula: C12H14O3
SMILES: CCOC(=O)C=Cc1ccc(OC)cc1
Mol. weight [g/mol]: 206.24
CAS: 24393-56-4

Physical Properties

Property code	Value	Unit	Source
gf	-105.76	kJ/mol	Joback Method
hf	-325.75	kJ/mol	Joback Method
hfus	24.67	kJ/mol	Joback Method
hvap	56.77	kJ/mol	Joback Method
log10ws	-2.53		Crippen Method
logp	2.272		Crippen Method
mcvol	165.190	ml/mol	McGowan Method
pc	2568.89	kPa	Joback Method
rinpol	1760.00		NIST Webbook
rinpol	1785.10		NIST Webbook
tb	608.49	K	Joback Method
tc	821.95	K	Joback Method
tf	353.25	K	Joback Method
vc	0.622	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	398.77	J/mol×K	608.49	Joback Method
cpg	461.38	J/mol×K	786.38	Joback Method
cpg	450.41	J/mol×K	750.80	Joback Method
cpg	438.68	J/mol×K	715.22	Joback Method
cpg	426.17	J/mol×K	679.64	Joback Method

cpg	412.88	J/mol×K	644.07	Joback Method
cpg	471.62	J/mol×K	821.95	Joback Method
dvisc	0.0001240	Pa×s	608.49	Joback Method
dvisc	0.0001566	Pa×s	565.95	Joback Method
dvisc	0.0002054	Pa×s	523.41	Joback Method
dvisc	0.0002826	Pa×s	480.87	Joback Method
dvisc	0.0004138	Pa×s	438.33	Joback Method
dvisc	0.0006576	Pa×s	395.79	Joback Method
dvisc	0.0011684	Pa×s	353.25	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=C24393564&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume