Allyl cinnamate

Other names:	2-Propenoic acid, 3-phenyl-, 2-propenyl ester
	Cinnamic acid, allyl ester
	Allyl 3-phenylacrylate
	Propenyl cinnamate
	Vinyl carbinyl cinnamate
	Allylester kyseliny skoricove
	Allyl 3-phenyl-2-propenoate
	2-Propenoic acid, 3-phenyl-, 2-propen-1-yl ester
	NSC 20972
Inchi:	InChI=1S/C12H12O2/c1-2-10-14-12(13)9-8-11-6-4-3-5-7-11/h2-9H,1,10H2/b9-8+
InchiKey:	KCMITHMNVLRGJU-CMDGGOBGSA-N
Formula:	C12H12O2
SMILES:	C=CCOC(=O)C=Cc1ccccc1
Mol. weight [g/mol]:	188.22
CAS:	1866-31-5

Physical Properties

Property code	Value	Unit	Source
gf	96.71	kJ/mol	Joback Method
hf	-56.63	kJ/mol	Joback Method
hfus	22.59	kJ/mol	Joback Method
hvap	53.03	kJ/mol	Joback Method
log10ws	-2.69		Crippen Method
logp	2.429		Crippen Method
mcvol	155.020	ml/mol	McGowan Method
pc	2773.00	kPa	Joback Method
rinpol	1537.00		NIST Webbook
rinpol	1524.00		NIST Webbook
ripol	2258.00		NIST Webbook
ripol	2258.00		NIST Webbook
tb	577.77	K	Joback Method
tc	797.26	K	Joback Method
tf	316.74	K	Joback Method
vc	0.585	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	354.11	J/mol×K	577.77	Joback Method
cpg	415.30	J/mol×K	760.68	Joback Method
cpg	404.73	J/mol×K	724.10	Joback Method
cpg	393.37	J/mol×K	687.52	Joback Method
cpg	381.18	J/mol×K	650.93	Joback Method
cpg	368.11	J/mol×K	614.35	Joback Method
cpg	425.13	J/mol×K	797.26	Joback Method
dvisc	0.0001620	Pa×s	577.77	Joback Method
dvisc	0.0002074	Pa×s	534.26	Joback Method
dvisc	0.0002774	Pa×s	490.76	Joback Method
dvisc	0.0003927	Pa×s	447.25	Joback Method
dvisc	0.0005990	Pa×s	403.75	Joback Method
dvisc	0.0010120	Pa×s	360.25	Joback Method
dvisc	0.0019746	Pa×s	316.74	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1866315&Units=SI

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume