Carbonic acid, allyl phenyl ester

Inchi: InChI=1S/C10H10O3/c1-2-8-12-10(11)13-9-6-4-3-5-7-9/h2-7H,1,8H2
InchiKey: ORUWSEKEVGOAQR-UHFFFAOYSA-N
Formula: C10H10O3
SMILES: C=CCOC(=O)Oc1ccccc1
Mol. weight [g/mol]: 178.18

Physical Properties

Property code	Value	Unit	Source
gf	-105.35	kJ/mol	Joback Method
hf	-264.79	kJ/mol	Joback Method
hfus	18.39	kJ/mol	Joback Method
hvap	51.03	kJ/mol	Joback Method
log10ws	-2.54		Crippen Method
logp	2.388		Crippen Method
mcvol	137.010	ml/mol	McGowan Method
pc	3170.40	kPa	Joback Method
rinpol	1291.00		NIST Webbook
tb	550.27	K	Joback Method
tc	765.17	K	Joback Method
tf	321.51	K	Joback Method
vc	0.510	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	305.05	J/mol×K	550.27	Joback Method
cpg	361.15	J/mol×K	729.35	Joback Method
cpg	351.32	J/mol×K	693.53	Joback Method
cpg	340.80	J/mol×K	657.72	Joback Method
cpg	329.59	J/mol×K	621.90	Joback Method
cpg	317.68	J/mol×K	586.09	Joback Method
cpg	370.31	J/mol×K	765.17	Joback Method
dvisc	0.0001822	Pa×s	550.27	Joback Method
dvisc	0.0002297	Pa×s	512.14	Joback Method

dvisc	0.0003004	Pa×s	474.02	Joback Method
dvisc	0.0004119	Pa×s	435.89	Joback Method
dvisc	0.0006001	Pa×s	397.76	Joback Method
dvisc	0.0009467	Pa×s	359.64	Joback Method
dvisc	0.0016642	Pa×s	321.51	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=U357805&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