

Carbonic acid, allyl 2-ethoxyethyl ester

Inchi:	InChI=1S/C8H14O4/c1-3-5-11-8(9)12-7-6-10-4-2/h3H,1,4-7H2,2H3
InchiKey:	YVJQGFVSKGYEIZ-UHFFFAOYSA-N
Formula:	C8H14O4
SMILES:	C=CCOC(=O)OCCOCC
Mol. weight [g/mol]:	174.19

Physical Properties

Property code	Value	Unit	Source
gf	-339.60	kJ/mol	Joback Method
hf	-592.26	kJ/mol	Joback Method
hfus	20.36	kJ/mol	Joback Method
hvap	46.71	kJ/mol	Joback Method
log10ws	-1.04		Crippen Method
logp	1.362		Crippen Method
mcvol	138.460	ml/mol	McGowan Method
pc	2679.08	kPa	Joback Method
rinpol	1166.00		NIST Webbook
tb	500.25	K	Joback Method
tc	677.58	K	Joback Method
tf	294.78	K	Joback Method
vc	0.524	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	310.04	J/mol×K	500.25	Joback Method
cpg	321.38	J/mol×K	529.80	Joback Method
cpg	332.38	J/mol×K	559.36	Joback Method
cpg	343.02	J/mol×K	588.91	Joback Method
cpg	353.30	J/mol×K	618.47	Joback Method
cpg	363.20	J/mol×K	648.02	Joback Method
cpg	372.71	J/mol×K	677.58	Joback Method
dvisc	0.0016940	Pa×s	294.78	Joback Method
dvisc	0.0009591	Pa×s	329.02	Joback Method

dvisc	0.0006045	Pa×s	363.27	Joback Method
dvisc	0.0004126	Pa×s	397.51	Joback Method
dvisc	0.0002992	Pa×s	431.76	Joback Method
dvisc	0.0002274	Pa×s	466.00	Joback Method
dvisc	0.0001795	Pa×s	500.25	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U357377&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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