

Diallyl carbonate

Other names:	Carbonic acid, di-2-propenyl ester Allyl carbonate Carbonic acid, diallyl ester
Inchi:	InChI=1S/C7H10O3/c1-3-5-9-7(8)10-6-4-2/h3-4H,1-2,5-6H2
InchiKey:	JKJWYKGYGWOAHT-UHFFFAOYSA-N
Formula:	C7H10O3
SMILES:	C=CCOC(=O)OCC=C
Mol. weight [g/mol]:	142.15
CAS:	15022-08-9

Physical Properties

Property code	Value	Unit	Source
gf	-155.18	kJ/mol	Joback Method
hf	-313.97	kJ/mol	Joback Method
hfus	15.30	kJ/mol	Joback Method
hvap	41.40	kJ/mol	Joback Method
log10ws	-1.39		Crippen Method
logp	1.512		Crippen Method
mcvol	114.200	ml/mol	McGowan Method
pc	3166.83	kPa	Joback Method
tb	451.63	K	Joback Method
tc	634.87	K	Joback Method
tf	259.52	K	Joback Method
vc	0.431	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.01	J/mol×K	451.63	Joback Method
cpg	238.64	J/mol×K	482.17	Joback Method
cpg	247.94	J/mol×K	512.71	Joback Method
cpg	256.90	J/mol×K	543.25	Joback Method
cpg	265.52	J/mol×K	573.79	Joback Method
cpg	273.80	J/mol×K	604.33	Joback Method

cpg	281.74	J/mol×K	634.87	Joback Method
dvisc	0.0020218	Pa×s	259.52	Joback Method
dvisc	0.0011518	Pa×s	291.54	Joback Method
dvisc	0.0007335	Pa×s	323.56	Joback Method
dvisc	0.0005066	Pa×s	355.57	Joback Method
dvisc	0.0003720	Pa×s	387.59	Joback Method
dvisc	0.0002863	Pa×s	419.61	Joback Method
dvisc	0.0002287	Pa×s	451.63	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=C15022089&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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