

Diallyl oxalate

Inchi:	InChI=1S/C8H10O4/c1-3-5-11-7(9)8(10)12-6-4-2/h3-4H,1-2,5-6H2
InchiKey:	BKXRKRANFLTFU-UHFFFAOYSA-N
Formula:	C8H10O4
SMILES:	<chem>C=CCOC(=O)C(=O)OCC=C</chem>
Mol. weight [g/mol]:	170.16
CAS:	615-99-6

Physical Properties

Property code	Value	Unit	Source
gf	-275.68	kJ/mol	Joback Method
hf	-447.19	kJ/mol	Joback Method
hfus	19.49	kJ/mol	Joback Method
hvap	50.37	kJ/mol	Joback Method
log10ws	-0.60		Crippen Method
logp	0.445		Crippen Method
mcvol	129.860	ml/mol	McGowan Method
pc	3052.41	kPa	Joback Method
tb	528.38	K	Joback Method
tc	719.27	K	Joback Method
tf	320.72	K	Joback Method
vc	0.493	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.88	J/molxK	528.38	Joback Method
cpg	295.01	J/molxK	560.19	Joback Method
cpg	304.70	J/molxK	592.01	Joback Method
cpg	313.96	J/molxK	623.82	Joback Method
cpg	322.79	J/molxK	655.64	Joback Method
cpg	331.18	J/molxK	687.45	Joback Method
cpg	339.13	J/molxK	719.27	Joback Method
dvisc	0.0018542	Paxs	320.72	Joback Method
dvisc	0.0011166	Paxs	355.33	Joback Method

dvisc	0.0007357	Paxs	389.94	Joback Method
dvisc	0.0005189	Paxs	424.55	Joback Method
dvisc	0.0003858	Paxs	459.16	Joback Method
dvisc	0.0002990	Paxs	493.77	Joback Method
dvisc	0.0002396	Paxs	528.38	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C615996&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

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/112-242-8/Diallyl-oxalate.pdf>

Generated by Cheméo on 2024-04-27 08:00:50.048444991 +0000 UTC m=+16494098.969022304.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.