1,4-Benzenedicarboxylic acid, di-2-propenyl ester

Other names: Diallyl terephthalate
Terephthalic acid, diallyl ester
Diallyl ester of terephthalic acid
Inchi: InChI=1S/C14H14O4/c1-3-9-17-13(15)11-5-7-12(8-6-11)14(16)18-10-4-2/h3-8H,1-2,9-10
InchiKey: ZDNFTNPFYCKVTB-UHFFFAOYSA-N
Formula: C14H14O4
SMILES: C=CCOC(=O)c1ccc(C(=O)OCC=C)cc1
Mol. weight [g/mol]: 246.26
CAS: 1026-92-2

Physical Properties

Property code	Value	Unit	Source
gf	-122.38	kJ/mol	Joback Method
hf	-345.97	kJ/mol	Joback Method
hfus	28.68	kJ/mol	Joback Method
hvap	66.67	kJ/mol	Joback Method
log10ws	-3.34		Crippen Method
logp	2.372		Crippen Method
mcvol	190.640	ml/mol	McGowan Method
pc	2333.78	kPa	Joback Method
tb	697.32	K	Joback Method
tc	910.28	K	Joback Method
tf	427.28	K	Joback Method
vc	0.722	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	492.72	J/mol×K	697.32	Joback Method
cpg	550.00	J/mol×K	874.79	Joback Method
cpg	540.24	J/mol×K	839.30	Joback Method
cpg	529.64	J/mol×K	803.80	Joback Method
cpg	518.21	J/mol×K	768.31	Joback Method
cpg	505.90	J/mol×K	732.81	Joback Method

cpg	558.95	J/mol×K	910.28	Joback Method
dvisc	0.0001321	Pa×s	697.32	Joback Method
dvisc	0.0001645	Pa×s	652.31	Joback Method
dvisc	0.0002116	Pa×s	607.31	Joback Method
dvisc	0.0002834	Pa×s	562.30	Joback Method
dvisc	0.0003993	Pa×s	517.29	Joback Method
dvisc	0.0006008	Pa×s	472.29	Joback Method
dvisc	0.0009851	Pa×s	427.28	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1026922&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
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume