1,2-Benzenedicarboxylic acid, 2-ethoxy-2-oxoethyl methyl ester

Other names: Phthalic acid, methyl ester, ester with ethyl glycolate
Ethyl o-[o-(methoxycarbonyl)benzoyl]glycolate
Methyl carbethoxymethyl phthalate
Methyl phthalyl ethyl glycolate
Santicizer M-17
Ethyl o-(methoxycarbonyl)benzoyloxyacetate
Glycolic acid, ethyl ester, methyl phthalate
Phthalic acid, monomethyl ester, ester with ethyl glycolate
Ethoxykarbonylmethyl-methylester kyseliny ftalove
Ethoxycarbonylmethyl methyl phthalate
NSC 4836
1-(2-Ethoxy-2-oxoethyl) 2-methyl phthalate

Inchi: InChI=1S/C13H14O6/c1-3-18-11(14)8-19-13(16)10-7-5-4-6-9(10)12(15)17-2/h4-7H,3,8H

InchiKey: OYMDOVKIWFMTAW-UHFFFAOYSA-N

Formula: C13H14O6

SMILES: CCOC(=O)COC(=O)c1ccccc1C(=O)OC

Mol. weight [g/mol]: 266.25

CAS: 85-71-2

Physical Properties

Property code	Value	Unit	Source
gf	-540.40	kJ/mol	Joback Method
hf	-820.99	kJ/mol	Joback Method
hfus	31.44	kJ/mol	Joback Method
hvap	74.94	kJ/mol	Joback Method
log10ws	-2.07		Crippen Method
logp	1.193		Crippen Method
mcvol	192.590	ml/mol	McGowan Method
pc	2470.27	kPa	Joback Method
tb	757.37	K	Joback Method
tc	970.44	K	Joback Method
tf	491.69	K	Joback Method
vc	0.728	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	527.41	J/mol×K	757.37	Joback Method
cpg	539.51	J/mol×K	792.88	Joback Method
cpg	550.67	J/mol×K	828.39	Joback Method
cpg	560.88	J/mol×K	863.91	Joback Method
cpg	570.13	J/mol×K	899.42	Joback Method
cpg	578.41	J/mol×K	934.93	Joback Method
cpg	585.70	J/mol×K	970.44	Joback Method
dvisc	0.0006662	Pa×s	491.69	Joback Method
dvisc	0.0004289	Pa×s	535.97	Joback Method
dvisc	0.0002953	Pa×s	580.25	Joback Method
dvisc	0.0002143	Pa×s	624.53	Joback Method
dvisc	0.0001623	Pa×s	668.81	Joback Method
dvisc	0.0001273	Pa×s	713.09	Joback Method
dvisc	0.0001026	Pa×s	757.37	Joback Method

Sources

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=C85712&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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