«beta»-Phenoxyethyl methacrylate

Other names:	2-Phenoxyethyl methacrylate
	2-Propenoic acid, 2-methyl-, 2-phenoxyethyl ester
	Methacrylic acid, 2-phenoxyethyl ester
Inchi:	InChI=1S/C12H14O3/c1-10(2)12(13)15-9-8-14-11-6-4-3-5-7-11/h3-7H,1,8-9H2,2H3
InchiKey:	CEXQWAAGPPNOQF-UHFFFAOYSA-N
Formula:	C12H14O3
SMILES:	C=C(C)C(=O)OCCOc1ccccc1
Mol. weight [g/mol]:	206.24
CAS:	10595-06-9

Physical Properties

Property code	Value	Unit	Source
gf	-97.06	kJ/mol	Joback Method
hf	-315.86	kJ/mol	Joback Method
hfus	22.26	kJ/mol	Joback Method
hvap	55.56	kJ/mol	Joback Method
log10ws	-2.40		Crippen Method
logp	2.185		Crippen Method
mcvol	165.190	ml/mol	McGowan Method
pc	2595.13	kPa	Joback Method
tb	595.91	K	Joback Method
tc	807.45	K	Joback Method
tf	330.09	K	Joback Method
vc	0.624	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	398.65	J/mol×K	595.91	Joback Method
cpg	413.10	J/mol×K	631.17	Joback Method
cpg	426.71	J/mol×K	666.42	Joback Method
cpg	439.51	J/mol×K	701.68	Joback Method
cpg	451.51	J/mol×K	736.94	Joback Method
cpg	462.71	J/mol×K	772.19	Joback Method

cpg	473.14	J/mol×K	807.45	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Phase behaviour for the (carbon dioxide + 2-phenoxyethyl acrylate) and (carbon dioxide + 2-phenoxyethyl methacrylate) systems at temperatures from (313.2 to 393.2) K and pressures from (5 to 31) MPa:	https://www.doi.org/10.1016/j.jct.2010.01.011
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=C10595069&Units=SI

Legend

cpg:	Ideal gas heat capacity
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