Methacrylic acid, 4-biphenyl ester

Inchi: InChI=1S/C16H14O2/c1-12(2)16(17)18-15-10-8-14(9-11-15)13-6-4-3-5-7-13/h3-11H,1H2
InchiKey: HEJFLAMVALNBRR-UHFFFAOYSA-N
Formula: C16H14O2
SMILES: C=C(C)C(=O)Oc1ccc(-c2ccccc2)cc1
Mol. weight [g/mol]: 238.28

Physical Properties

Property code	Value	Unit	Source
gf	144.40	kJ/mol	Joback Method
hf	-41.14	kJ/mol	Joback Method
hfus	25.09	kJ/mol	Joback Method
hvap	64.99	kJ/mol	Joback Method
log10ws	-5.08		Crippen Method
logp	3.835		Crippen Method
mcvol	191.920	ml/mol	McGowan Method
pc	2465.36	kPa	Joback Method
rinpol	2025.00		NIST Webbook
rinpol	2025.00		NIST Webbook
tb	696.67	K	Joback Method
tc	939.18	K	Joback Method
tf	391.88	K	Joback Method
vc	0.722	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	494.08	J/mol×K	696.67	Joback Method
cpg	509.67	J/mol×K	737.09	Joback Method
cpg	524.01	J/mol×K	777.51	Joback Method
cpg	537.16	J/mol×K	817.93	Joback Method
cpg	549.19	J/mol×K	858.34	Joback Method
cpg	560.17	J/mol×K	898.76	Joback Method
cpg	570.15	J/mol×K	939.18	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360695&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume