Cyclobutanecarboxylic acid, 4-biphenyl ester

Inchi: InChI=1S/C17H16O2/c18-17(15-7-4-8-15)19-16-11-9-14(10-12-16)13-5-2-1-3-6-13/h1-3,
InchiKey: ZQNORTRYBZAUBN-UHFFFAOYSA-N
Formula: C17H16O2
SMILES: O=C(Oc1ccc(-c2ccccc2)cc1)C1CCC1
Mol. weight [g/mol]: 252.31

Physical Properties

Property code	Value	Unit	Source
gf	122.18	kJ/mol	Joback Method
hf	-110.78	kJ/mol	Joback Method
hfus	26.30	kJ/mol	Joback Method
hvap	67.89	kJ/mol	Joback Method
log10ws	-5.30		Crippen Method
logp	4.059		Crippen Method
mcvol	199.450	ml/mol	McGowan Method
pc	2495.01	kPa	Joback Method
rinpol	2257.00		NIST Webbook
tb	734.00	K	Joback Method
tc	985.83	K	Joback Method
tf	433.29	K	Joback Method
vc	0.745	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	558.31	J/mol×K	734.00	Joback Method
cpg	575.62	J/mol×K	775.97	Joback Method
cpg	591.45	J/mol×K	817.94	Joback Method
cpg	605.89	J/mol×K	859.91	Joback Method
cpg	619.04	J/mol×K	901.88	Joback Method
cpg	631.01	J/mol×K	943.86	Joback Method
cpg	641.88	J/mol×K	985.83	Joback Method
dvisc	0.0014537	Pa×s	433.29	Joback Method
dvisc	0.0009024	Pa×s	483.41	Joback Method

dvisc	0.0006127	Pa×s	533.53	Joback Method
dvisc	0.0004446	Pa×s	583.64	Joback Method
dvisc	0.0003394	Pa×s	633.76	Joback Method
dvisc	0.0002696	Pa×s	683.88	Joback Method
dvisc	0.0002209	Pa×s	734.00	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=U355165&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume