3-Butene-2-one-4-ol, 1,4-diphenyl-

Inchi: InChI=1S/C16H14O2/c17-15(11-13-7-3-1-4-8-13)12-16(18)14-9-5-2-6-10-14/h1-10,12,18
InchiKey: GUHCMRKVXZWKCO-VBKFSLOCSA-N
Formula: C16H14O2
SMILES: O=C(C=C(O)c1ccccc1)Cc1ccccc1
Mol. weight [g/mol]: 238.28
CAS: 3442-15-7

Physical Properties

Property code	Value	Unit	Source
gf	114.59	kJ/mol	Joback Method
hf	-57.89	kJ/mol	Joback Method
hfus	29.86	kJ/mol	Joback Method
hvap	79.23	kJ/mol	Joback Method
ie	8.36	eV	NIST Webbook
log10ws	-3.85		Crippen Method
logp	3.397		Crippen Method
mcvol	191.920	ml/mol	McGowan Method
pc	2829.33	kPa	Joback Method
tb	768.93	K	Joback Method
tc	998.58	K	Joback Method
tf	414.63	K	Joback Method
vc	0.722	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	521.68	J/mol×K	768.93	Joback Method
cpg	534.20	J/mol×K	807.21	Joback Method
cpg	545.76	J/mol×K	845.48	Joback Method
cpg	556.45	J/mol×K	883.76	Joback Method
cpg	566.37	J/mol×K	922.03	Joback Method
cpg	575.61	J/mol×K	960.31	Joback Method
cpg	584.26	J/mol×K	998.58	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=C3442157&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
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
ie:	Ionization energy
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