5-Phenyl-2,4-pentadienophenone

Other names:	Cinnamylideneacetophenone
	«alpha»-Cinnamylideneacetophenone
	2,4-Pentadien-1-one, 1,5-diphenyl-
	5-phenylpenta-2,4-dienophenone
Inchi:	InChI=1S/C17H14O/c18-17(16-12-5-2-6-13-16)14-8-7-11-15-9-3-1-4-10-15/h1-14H/b11-7
InchiKey:	QONKLJMPKWQQFG-HPIZBCMHSA-N
Formula:	C17H14O
SMILES:	O=C(C=CC=Cc1ccccc1)c1ccccc1
Mol. weight [g/mol]:	234.29
CAS:	614-57-3

Physical Properties

Property code	Value	Unit	Source
gf	348.60	kJ/mol	Joback Method
hf	200.71	kJ/mol	Joback Method
hfus	29.87	kJ/mol	Joback Method
hvap	64.65	kJ/mol	Joback Method
log10ws	-4.88		Crippen Method
logp	4.139		Crippen Method
mcvol	195.840	ml/mol	McGowan Method
pc	2448.32	kPa	Joback Method
tb	703.91	K	Joback Method
tc	954.96	K	Joback Method
tf	373.96	K	Joback Method
vc	0.738	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	498.70	J/mol×K	703.91	Joback Method
cpg	565.84	J/mol×K	913.11	Joback Method
cpg	554.49	J/mol×K	871.27	Joback Method
cpg	542.24	J/mol×K	829.43	Joback Method
cpg	528.96	J/mol×K	787.59	Joback Method

cpg	514.49	J/mol×K	745.75	Joback Method
cpg	576.44	J/mol×K	954.96	Joback Method
dvisc	0.0001044	Pa×s	703.91	Joback Method
dvisc	0.0001357	Pa×s	648.92	Joback Method
dvisc	0.0001851	Pa×s	593.93	Joback Method
dvisc	0.0002691	Pa×s	538.93	Joback Method
dvisc	0.0004258	Pa×s	483.94	Joback Method
dvisc	0.0007579	Pa×s	428.95	Joback Method
dvisc	0.0015983	Pa×s	373.96	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=C614573&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

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