

4,4'-Diacetyldiphenylmethane

Inchi:	InChI=1S/C17H16O2/c1-12(18)16-7-3-14(4-8-16)11-15-5-9-17(10-6-15)13(2)19/h3-10H,
InchiKey:	UTELZOWACOGDKG-UHFFFAOYSA-N
Formula:	C17H16O2
SMILES:	CC(=O)c1ccc(Cc2ccc(C(C)=O)cc2)cc1
Mol. weight [g/mol]:	252.31
CAS:	790-82-9

Physical Properties

Property code	Value	Unit	Source
gf	39.98	kJ/mol	Joback Method
hf	-169.25	kJ/mol	Joback Method
hfus	30.29	kJ/mol	Joback Method
hvap	72.80	kJ/mol	Joback Method
log10ws	-4.89		Crippen Method
logp	3.683		Crippen Method
mcvol	206.010	ml/mol	McGowan Method
pc	2284.95	kPa	Joback Method
tb	759.42	K	Joback Method
tc	998.15	K	Joback Method
tf	459.09	K	Joback Method
vc	0.783	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	559.17	J/molxK	759.42	Joback Method
cpg	573.86	J/molxK	799.21	Joback Method
cpg	587.37	J/molxK	839.00	Joback Method
cpg	599.76	J/molxK	878.79	Joback Method
cpg	611.09	J/molxK	918.57	Joback Method
cpg	621.44	J/molxK	958.36	Joback Method
cpg	630.86	J/molxK	998.15	Joback Method
dvisc	0.0010932	Paxs	459.09	Joback Method
dvisc	0.0006584	Paxs	509.15	Joback Method

dvisc	0.0004342	Paxs	559.20	Joback Method
dvisc	0.0003066	Paxs	609.25	Joback Method
dvisc	0.0002283	Paxs	659.31	Joback Method
dvisc	0.0001772	Paxs	709.37	Joback Method
dvisc	0.0001422	Paxs	759.42	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
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=C790829&Units=SI

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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