1-Propanone, 1-(4-methoxyphenyl)-

Other names: Propiophenone, 4'-methoxy-
p-Methoxypropiophenone
Ethyl 4-methoxyphenyl ketone
4'-Methoxypropiophenone
4-Methoxypropiophenone
1-(4-Methoxyphenyl)-1-propanone

Inchi: InChI=1S/C10H12O2/c1-3-10(11)8-4-6-9(12-2)7-5-8/h4-7H,3H2,1-2H3

InchiKey: ZJVAWPKTWVFKHG-UHFFFAOYSA-N

Formula: C10H12O2

SMILES: CCC(=O)c1ccc(OC)cc1

Mol. weight [g/mol]: 164.20

CAS: 121-97-1

Physical Properties

Property code	Value	Unit	Source
gf	-97.82	kJ/mol	Joback Method
hf	-269.47	kJ/mol	Joback Method
hfus	18.10	kJ/mol	Joback Method
hvap	49.95	kJ/mol	Joback Method
log10ws	-2.67		Crippen Method
logp	2.288		Crippen Method
mcvol	135.440	ml/mol	McGowan Method
pc	3032.27	kPa	Joback Method
tb	547.20	K	NIST Webbook
tc	749.95	K	Joback Method
tf	313.56	K	Joback Method
vc	0.511	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	300.27	J/mol×K	536.15	Joback Method
cpg	313.54	J/mol×K	571.78	Joback Method
cpg	326.10	J/mol×K	607.42	Joback Method

cpg	337.97	J/mol×K	643.05	Joback Method
cpg	349.15	J/mol×K	678.68	Joback Method
cpg	359.66	J/mol×K	714.31	Joback Method
cpg	369.52	J/mol×K	749.95	Joback Method
dvisc	0.0017515	Pa×s	313.56	Joback Method
dvisc	0.0010200	Pa×s	350.66	Joback Method
dvisc	0.0006587	Pa×s	387.76	Joback Method
dvisc	0.0004592	Pa×s	424.86	Joback Method
dvisc	0.0003392	Pa×s	461.95	Joback Method
dvisc	0.0002621	Pa×s	499.05	Joback Method
dvisc	0.0002099	Pa×s	536.15	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C121971&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
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

Latest version available from: