

Ethanone, 1-(4-cyclohexylphenyl)-

Other names:	4-Cyclohexylacetophenone 1-(4-cyclohexylphenyl)ethan-1-one 4'-Cyclohexylacetophenone
Inchi:	InChI=1S/C14H18O/c1-11(15)12-7-9-14(10-8-12)13-5-3-2-4-6-13/h7-10,13H,2-6H2,1H3
InchiKey:	MSDQNIRGPBARGC-UHFFFAOYSA-N
Formula:	C14H18O
SMILES:	CC(=O)c1ccc(C2CCCCC2)cc1
Mol. weight [g/mol]:	202.29
CAS:	18594-05-3

Physical Properties

Property code	Value	Unit	Source
gf	65.31	kJ/mol	Joback Method
hf	-165.49	kJ/mol	Joback Method
hfus	19.10	kJ/mol	Joback Method
hvap	56.87	kJ/mol	Joback Method
log10ws	-4.47		Crippen Method
logp	3.937		Crippen Method
mcvol	175.070	ml/mol	McGowan Method
pc	2555.92	kPa	Joback Method
tb	624.80	K	Joback Method
tc	864.56	K	Joback Method
tf	343.79	K	Joback Method
vc	0.650	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	457.84	J/mol×K	624.80	Joback Method
cpg	543.76	J/mol×K	824.60	Joback Method
cpg	529.22	J/mol×K	784.64	Joback Method
cpg	513.42	J/mol×K	744.68	Joback Method
cpg	496.30	J/mol×K	704.72	Joback Method
cpg	477.79	J/mol×K	664.76	Joback Method

cpg	557.09	J/molxK	864.56	Joback Method
dvisc	0.0002008	Paxs	624.80	Joback Method
dvisc	0.0002596	Paxs	577.96	Joback Method
dvisc	0.0003513	Paxs	531.13	Joback Method
dvisc	0.0005039	Paxs	484.29	Joback Method
dvisc	0.0007808	Paxs	437.46	Joback Method
dvisc	0.0013440	Paxs	390.62	Joback Method
dvisc	0.0026821	Paxs	343.79	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	453.20	K	1.90	NIST Webbook

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18594053&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

tbrp: Boiling point at reduced pressure
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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