n-Octyl phenyl ketone

Other names:	n-Nonanophenone
	1-Nonanone, 1-phenyl-
	1-Phenyl-1-nonanone
	1-Phenylnonan-1-one
Inchi:	InChI=1S/C15H22O/c1-2-3-4-5-6-10-13-15(16)14-11-8-7-9-12-14/h7-9,11-12H,2-6,10,13
InchiKey:	PFUPABFCHVRLLY-UHFFFAOYSA-N
Formula:	C15H22O
SMILES:	CCCCCCCCC(=O)c1ccccc1
Mol. weight [g/mol]:	218.33
CAS:	6008-36-2

Physical Properties

Property code	Value	Unit	Source
gf	58.91	kJ/mol	Joback Method
hf	-228.98	kJ/mol	Joback Method
hfus	30.25	kJ/mol	Joback Method
hvap	58.01	kJ/mol	Joback Method
log10ws	-5.06		Crippen Method
logp	4.620		Crippen Method
mcvol	200.020	ml/mol	McGowan Method
pc	1950.95	kPa	Joback Method
rinpol	1794.00		NIST Webbook
rinpol	1794.00		NIST Webbook
tb	623.15	K	Joback Method
tc	822.26	K	Joback Method
tf	335.16	K	Joback Method
vc	0.773	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	518.45	J/mol×K	623.15	Joback Method
cpg	535.64	J/mol×K	656.33	Joback Method
cpg	551.85	J/mol×K	689.52	Joback Method

cpg	567.13	J/mol×K	722.70	Joback Method
cpg	581.52	J/mol×K	755.89	Joback Method
cpg	595.04	J/mol×K	789.07	Joback Method
cpg	607.76	J/mol×K	822.26	Joback Method
dvisc	0.0027358	Pa×s	335.16	Joback Method
dvisc	0.0012943	Pa×s	383.16	Joback Method
dvisc	0.0007234	Pa×s	431.16	Joback Method
dvisc	0.0004543	Pa×s	479.15	Joback Method
dvisc	0.0003105	Pa×s	527.15	Joback Method
dvisc	0.0002261	Pa×s	575.15	Joback Method
dvisc	0.0001729	Pa×s	623.15	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=C6008362&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume