

8-Phenyl-1-octyl chloride

Other names:	1-Chloro-8-phenyloctane
Inchi:	InChI=1S/C14H21Cl/c15-13-9-4-2-1-3-6-10-14-11-7-5-8-12-14/h5,7-8,11-12H,1-4,6,9-10
InchiKey:	GVDYDOFBAKCSGC-UHFFFAOYSA-N
Formula:	C14H21Cl
SMILES:	C1CCCCCCCCc1cccc1
Mol. weight [g/mol]:	224.77
CAS:	61440-32-2

Physical Properties

Property code	Value	Unit	Source
gf	167.48	kJ/mol	Joback Method
hf	-111.50	kJ/mol	Joback Method
hfus	30.25	kJ/mol	Joback Method
hvap	53.42	kJ/mol	Joback Method
log10ws	-4.94		Crippen Method
logp	4.809		Crippen Method
mcvol	196.600	ml/mol	McGowan Method
pc	1944.08	kPa	Joback Method
tb	583.83	K	Joback Method
tc	782.28	K	Joback Method
tf	303.88	K	Joback Method
vc	0.760	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	474.48	J/molxK	583.83	Joback Method
cpg	551.18	J/molxK	749.21	Joback Method
cpg	537.60	J/molxK	716.13	Joback Method
cpg	523.17	J/molxK	683.06	Joback Method
cpg	507.87	J/molxK	649.98	Joback Method
cpg	491.66	J/molxK	616.91	Joback Method
cpg	563.98	J/molxK	782.28	Joback Method
dvisc	0.0001750	Paxs	583.83	Joback Method

dvisc	0.0002299	Paxs	537.17	Joback Method
dvisc	0.0003181	Paxs	490.51	Joback Method
dvisc	0.0004712	Paxs	443.85	Joback Method
dvisc	0.0007655	Paxs	397.20	Joback Method
dvisc	0.0014150	Paxs	350.54	Joback Method
dvisc	0.0031589	Paxs	303.88	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61440322&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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