Benzene, (5-chloropentyl)-

Other names:	5-Phenyl-1-pentyl chloride
	1-Chloro-5-phenylpentane
Inchi:	InChI=1S/C11H15Cl/c12-10-6-2-5-9-11-7-3-1-4-8-11/h1,3-4,7-8H,2,5-6,9-10H2
InchiKey:	UXJLBVYYDZDPBV-UHFFFAOYSA-N
Formula:	C11H15Cl
SMILES:	ClCCCCCc1ccccc1
Mol. weight [g/mol]:	182.69
CAS:	15733-63-8

Physical Properties

Property code	Value	Unit	Source
gf	142.22	kJ/mol	Joback Method
hf	-49.58	kJ/mol	Joback Method
hfus	22.48	kJ/mol	Joback Method
hvap	46.74	kJ/mol	Joback Method
log10ws	-3.68		Crippen Method
logp	3.638		Crippen Method
mcvol	154.330	ml/mol	McGowan Method
pc	2550.76	kPa	Joback Method
rinpol	1353.00		NIST Webbook
rinpol	1353.00		NIST Webbook
tb	515.19	K	Joback Method
tc	722.57	K	Joback Method
tf	270.07	K	Joback Method
vc	0.593	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	329.94	J/mol×K	515.19	Joback Method
cpg	345.18	J/mol×K	549.75	Joback Method
cpg	359.54	J/mol×K	584.32	Joback Method
cpg	373.04	J/mol×K	618.88	Joback Method
cpg	385.74	J/mol×K	653.45	Joback Method

cpg	397.66	J/mol×K	688.01	Joback Method
cpg	408.84	J/mol×K	722.57	Joback Method
dvisc	0.0034879	Pa×s	270.07	Joback Method
dvisc	0.0016401	Pa×s	310.92	Joback Method
dvisc	0.0009189	Pa×s	351.78	Joback Method
dvisc	0.0005808	Pa×s	392.63	Joback Method
dvisc	0.0004003	Pa×s	433.48	Joback Method
dvisc	0.0002941	Pa×s	474.34	Joback Method
dvisc	0.0002270	Pa×s	515.19	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C15733638&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume