Benzene, 1-(1-chloroethyl)-4-(chloromethyl)-

Other names:	4-(1-Chloroethyl)benzyl chloride
	p-(Alpha-chloroethyl)benzyl chloride
	Benzene, 1-chloromethyl-4-(1-chloroethyl)-
Inchi:	InChI=1S/C9H10Cl2/c1-7(11)9-4-2-8(6-10)3-5-9/h2-5,7H,6H2,1H3
InchiKey:	OPVAKHQEJWPSQB-UHFFFAOYSA-N
Formula:	C9H10Cl2
SMILES:	CC(Cl)c1ccc(CCl)cc1
Mol. weight [g/mol]:	189.08
CAS:	54789-30-9

Physical Properties

Property code	Value	Unit	Source
gf	101.38	kJ/mol	Joback Method
hf	-40.79	kJ/mol	Joback Method
hfus	17.59	kJ/mol	Joback Method
hvap	46.95	kJ/mol	Joback Method
log10ws	-3.92		Crippen Method
logp	3.725		Crippen Method
mcvol	138.390	ml/mol	McGowan Method
pc	2979.54	kPa	Joback Method
tb	511.40	K	Joback Method
tc	737.08	K	Joback Method
tf	274.97	K	Joback Method
vc	0.523	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	268.89	J/mol×K	511.40	Joback Method
cpg	281.43	J/mol×K	549.01	Joback Method
cpg	293.17	J/mol×K	586.63	Joback Method
cpg	304.13	J/mol×K	624.24	Joback Method
cpg	314.35	J/mol×K	661.86	Joback Method
cpg	323.88	J/mol×K	699.47	Joback Method

cpg	332.74	J/mol×K	737.08	Joback Method
dvisc	0.0031101	Pa×s	274.97	Joback Method
dvisc	0.0015551	Pa×s	314.38	Joback Method
dvisc	0.0009074	Pa×s	353.78	Joback Method
dvisc	0.0005898	Pa×s	393.19	Joback Method
dvisc	0.0004147	Pa×s	432.59	Joback Method
dvisc	0.0003092	Pa×s	472.00	Joback Method
dvisc	0.0002413	Pa×s	511.40	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C54789309&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