Benzene, 1,2-dichloro-4,5-dimethyl

Inchi: InChI=1S/C8H8Cl2/c1-5-3-7(9)8(10)4-6(5)2/h3-4H,1-2H3
InchiKey: RLFZGSWNWDLFOM-UHFFFAOYSA-N
Formula: C8H8Cl2
SMILES: Cc1cc(Cl)c(Cl)cc1C
Mol. weight [g/mol]: 175.06

Physical Properties

Property code	Value	Unit	Source
gf	76.14	kJ/mol	Joback Method
hf	-37.81	kJ/mol	Joback Method
hfus	17.74	kJ/mol	Joback Method
hvap	46.43	kJ/mol	Joback Method
log10ws	-3.79		Crippen Method
logp	3.610		Crippen Method
mcvol	124.300	ml/mol	McGowan Method
pc	3177.55	kPa	Joback Method
rinpol	1270.00		NIST Webbook
rinpol	1258.00		NIST Webbook
rinpol	1270.00		NIST Webbook
tb	498.92	K	Joback Method
tc	725.78	K	Joback Method
tf	303.74	K	Joback Method
vc	0.473	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	226.14	J/mol×K	498.92	Joback Method
cpg	271.75	J/mol×K	687.97	Joback Method
cpg	263.69	J/mol×K	650.16	Joback Method
cpg	255.11	J/mol×K	612.35	Joback Method
cpg	246.01	J/mol×K	574.54	Joback Method
cpg	236.36	J/mol×K	536.73	Joback Method
cpg	279.32	J/mol×K	725.78	Joback Method

dvisc	0.0002532	Pa×s	498.92	Joback Method
dvisc	0.0003031	Pa×s	466.39	Joback Method
dvisc	0.0003727	Pa×s	433.86	Joback Method
dvisc	0.0004739	Pa×s	401.33	Joback Method
dvisc	0.0006287	Pa×s	368.80	Joback Method
dvisc	0.0008809	Pa×s	336.27	Joback Method
dvisc	0.0013268	Pa×s	303.74	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R528584&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