

1,2-Cyclohexanedicarboxylic acid, di((2-chlorocyclohexyl)methyl) ester

Inchi: InChI=1S/C22H34Cl2O4/c23-19-11-5-1-7-15(19)13-27-21(25)17-9-3-4-10-18(17)22(26)2
InchiKey: BRNANSGAGKELCH-UHFFFAOYSA-N
Formula: C22H34Cl2O4
SMILES: O=C(OCC1CCCCC1Cl)C1CCCCC1C(=O)OCC1CCCCC1Cl
Mol. weight [g/mol]: 433.41

Physical Properties

Property code	Value	Unit	Source
gf	-307.12	kJ/mol	Joback Method
hf	-916.55	kJ/mol	Joback Method
hfus	45.42	kJ/mol	Joback Method
hvap	92.01	kJ/mol	Joback Method
log10ws	-6.00		Crippen Method
logp	5.474		Crippen Method
mcvol	327.620	ml/mol	McGowan Method
pc	1279.16	kPa	Joback Method
rinsol	3183.00		NIST Webbook
tb	974.84	K	Joback Method
tc	1215.22	K	Joback Method
tf	551.28	K	Joback Method
vc	1.210	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1150.44	J/molxK	974.84	Joback Method
cpg	1166.97	J/molxK	1014.90	Joback Method
cpg	1181.03	J/molxK	1054.97	Joback Method
cpg	1192.64	J/molxK	1095.03	Joback Method
cpg	1201.84	J/molxK	1135.10	Joback Method
cpg	1208.66	J/molxK	1175.16	Joback Method
cpg	1213.14	J/molxK	1215.22	Joback Method
dvisc	0.0008321	Paxs	551.28	Joback Method
dvisc	0.0004403	Paxs	621.87	Joback Method

dvisc	0.0002653	Paxs	692.47	Joback Method
dvisc	0.0001755	Paxs	763.06	Joback Method
dvisc	0.0001246	Paxs	833.65	Joback Method
dvisc	0.0000933	Paxs	904.25	Joback Method
dvisc	0.0000728	Paxs	974.84	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U339865&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

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

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