

3-Cyclopentylpropionic acid, 3,4-dichlorophenyl ester

Inchi:	InChI=1S/C14H16Cl2O2/c15-12-7-6-11(9-13(12)16)18-14(17)8-5-10-3-1-2-4-10/h6-7,9-1
InchiKey:	JPOVKVUFJRAFMA-UHFFFAOYSA-N
Formula:	C14H16Cl2O2
SMILES:	O=C(CCC1CCCC1)Oc1ccc(Cl)c(Cl)c1
Mol. weight [g/mol]:	287.18

Physical Properties

Property code	Value	Unit	Source
gf	-61.08	kJ/mol	Joback Method
hf	-334.50	kJ/mol	Joback Method
hfus	30.39	kJ/mol	Joback Method
hvap	68.54	kJ/mol	Joback Method
log10ws	-5.32		Crippen Method
logp	4.869		Crippen Method
mvol	205.420	ml/mol	McGowan Method
pc	2248.26	kPa	Joback Method
rmpol	2072.00		NIST Webbook
rmpol	2072.00		NIST Webbook
tb	722.79	K	Joback Method
tc	957.71	K	Joback Method
tf	441.90	K	Joback Method
vc	0.774	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	538.43	J/molxK	722.79	Joback Method
cpg	553.95	J/molxK	761.94	Joback Method
cpg	568.29	J/molxK	801.10	Joback Method
cpg	581.47	J/molxK	840.25	Joback Method
cpg	593.56	J/molxK	879.40	Joback Method
cpg	604.59	J/molxK	918.56	Joback Method
cpg	614.61	J/molxK	957.71	Joback Method
dvisc	0.0012577	Paxs	441.90	Joback Method

dvisc	0.0007838	Paxs	488.71	Joback Method
dvisc	0.0005306	Paxs	535.53	Joback Method
dvisc	0.0003824	Paxs	582.35	Joback Method
dvisc	0.0002894	Paxs	629.16	Joback Method
dvisc	0.0002276	Paxs	675.97	Joback Method
dvisc	0.0001847	Paxs	722.79	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U307135&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
log_p:	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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