

Diglycolic acid, 4-chloro-2-acetylphenyl ethyl ester

Inchi:	InChI=1S/C14H15ClO6/c1-3-20-13(17)7-19-8-14(18)21-12-5-4-10(15)6-11(12)9(2)16/h4-
InchiKey:	NKDMVZZPZMZBKP-UHFFFAOYSA-N
Formula:	C14H15ClO6
SMILES:	CCOC(=O)COCC(=O)Oc1ccc(Cl)cc1C(C)=O
Mol. weight [g/mol]:	314.72

Physical Properties

Property code	Value	Unit	Source
gf	-553.54	kJ/mol	Joback Method
hf	-868.84	kJ/mol	Joback Method
hfus	37.84	kJ/mol	Joback Method
hvap	82.21	kJ/mol	Joback Method
log10ws	-2.75		Crippen Method
logp	2.028		Crippen Method
mvol	218.920	ml/mol	McGowan Method
pc	2143.35	kPa	Joback Method
rinpol	2644.00		NIST Webbook
rinpol	2644.00		NIST Webbook
tb	822.66	K	Joback Method
tc	1037.77	K	Joback Method
tf	545.40	K	Joback Method
vc	0.833	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	602.53	J/molxK	822.66	Joback Method
cpg	613.74	J/molxK	858.51	Joback Method
cpg	623.92	J/molxK	894.36	Joback Method
cpg	633.06	J/molxK	930.21	Joback Method
cpg	641.15	J/molxK	966.07	Joback Method
cpg	648.17	J/molxK	1001.92	Joback Method
cpg	654.11	J/molxK	1037.77	Joback Method
dvisc	0.0004629	Paxs	545.40	Joback Method

dvisc	0.0003084	Paxs	591.61	Joback Method
dvisc	0.0002179	Paxs	637.82	Joback Method
dvisc	0.0001614	Paxs	684.03	Joback Method
dvisc	0.0001242	Paxs	730.24	Joback Method
dvisc	0.0000985	Paxs	776.45	Joback Method
dvisc	0.0000803	Paxs	822.66	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U382702&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

Latest version available from:

<https://www.chemeo.com/cid/89-912-1/Diglycolic-acid-4-chloro-2-acetylphenyl-ethyl-ester.pdf>

Generated by Cheméo on 2024-10-10 08:34:00.540159247 +0000 UTC m=+3130103.177128495.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.