Glutaric acid, 2,2-dichloroethyl isopropyl ester

Inchi: InChI=1S/C10H16Cl2O4/c1-7(2)16-10(14)5-3-4-9(13)15-6-8(11)12/h7-8H,3-6H2,1-2H3
InchiKey: GDZQGVJEUBFMFI-UHFFFAOYSA-N
Formula: C10H16Cl2O4
SMILES: CC(C)OC(=O)CCCC(=O)OCC(Cl)Cl
Mol. weight [g/mol]: 271.14

Physical Properties

Property code	Value	Unit	Source
gf	-463.26	kJ/mol	Joback Method
hf	-781.37	kJ/mol	Joback Method
hfus	28.58	kJ/mol	Joback Method
hvap	64.16	kJ/mol	Joback Method
log10ws	-2.76		Crippen Method
logp	2.455		Crippen Method
mcvol	191.120	ml/mol	McGowan Method
pc	2175.46	kPa	Joback Method
rinpol	1612.00		NIST Webbook
rinpol	1612.00		NIST Webbook
tb	654.76	K	Joback Method
tc	849.84	K	Joback Method
tf	376.62	K	Joback Method
vc	0.730	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	470.82	J/mol×K	654.76	Joback Method
cpg	483.16	J/mol×K	687.27	Joback Method
cpg	494.84	J/mol×K	719.79	Joback Method
cpg	505.86	J/mol×K	752.30	Joback Method
cpg	516.21	J/mol×K	784.81	Joback Method
cpg	525.89	J/mol×K	817.33	Joback Method
cpg	534.91	J/mol×K	849.84	Joback Method
dvisc	0.0020941	Pa×s	376.62	Joback Method

dvisc	0.0010395	Pa×s	422.98	Joback Method
dvisc	0.0005926	Pa×s	469.33	Joback Method
dvisc	0.0003737	Pa×s	515.69	Joback Method
dvisc	0.0002543	Pa×s	562.05	Joback Method
dvisc	0.0001835	Pa×s	608.40	Joback Method
dvisc	0.0001387	Pa×s	654.76	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=U393372&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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