Glutaric acid, 2,2-dichloroethyl decyl ester

Inchi: InChI=1S/C17H30Cl2O4/c1-2-3-4-5-6-7-8-9-13-22-16(20)11-10-12-17(21)23-14-15(18)19
InchiKey: XGDBMYWDHLADHX-UHFFFAOYSA-N
Formula: C17H30Cl2O4
SMILES: CCCCCCCCCCOC(=O)CCCC(=O)OCC(Cl)Cl
Mol. weight [g/mol]: 369.32

Physical Properties

Property code	Value	Unit	Source
gf	-401.88	kJ/mol	Joback Method
hf	-920.57	kJ/mol	Joback Method
hfus	50.23	kJ/mol	Joback Method
hvap	80.13	kJ/mol	Joback Method
log10ws	-5.58		Crippen Method
logp	5.188		Crippen Method
mcvol	289.750	ml/mol	McGowan Method
pc	1253.92	kPa	Joback Method
rinpol	2406.00		NIST Webbook
rinpol	2406.00		NIST Webbook
tb	815.36	K	Joback Method
tc	1005.28	K	Joback Method
tf	470.51	K	Joback Method
vc	1.127	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	852.42	J/mol×K	815.36	Joback Method
cpg	867.74	J/mol×K	847.01	Joback Method
cpg	882.10	J/mol×K	878.67	Joback Method
cpg	895.51	J/mol×K	910.32	Joback Method
cpg	907.98	J/mol×K	941.97	Joback Method
cpg	919.55	J/mol×K	973.63	Joback Method
cpg	930.21	J/mol×K	1005.28	Joback Method
dvisc	0.0008474	Pa×s	470.51	Joback Method

dvisc	0.0004205	Pa×s	527.99	Joback Method
dvisc	0.0002395	Pa×s	585.46	Joback Method
dvisc	0.0001508	Pa×s	642.93	Joback Method
dvisc	0.0001025	Pa×s	700.41	Joback Method
dvisc	0.0000738	Pa×s	757.88	Joback Method
dvisc	0.0000557	Pa×s	815.36	Joback Method

Sources

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=U391548&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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