Glutaric acid, 2,2-dichloroethyl dodecyl ester

Inchi: InChI=1S/C19H34Cl2O4/c1-2-3-4-5-6-7-8-9-10-11-15-24-18(22)13-12-14-19(23)25-16-17(20)21
InchiKey: GOGJALPUMWJPSC-UHFFFAOYSA-N
Formula: C19H34Cl2O4
SMILES: CCCCCCCCCCCCOC(=O)CCCC(=O)OCC(Cl)Cl
Mol. weight [g/mol]: 397.38

Physical Properties

Property code	Value	Unit	Source
gf	-385.04	kJ/mol	Joback Method
hf	-961.85	kJ/mol	Joback Method
hfus	55.41	kJ/mol	Joback Method
hvap	84.58	kJ/mol	Joback Method
log10ws	-6.41		Crippen Method
logp	5.968		Crippen Method
mcvol	317.930	ml/mol	McGowan Method
pc	1099.35	kPa	Joback Method
rinpol	2611.00		NIST Webbook
rinpol	2611.00		NIST Webbook
tb	861.12	K	Joback Method
tc	1056.11	K	Joback Method
tf	493.05	K	Joback Method
vc	1.240	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	970.57	J/mol×K	861.12	Joback Method
cpg	986.62	J/mol×K	893.62	Joback Method
cpg	1001.58	J/mol×K	926.12	Joback Method
cpg	1015.48	J/mol×K	958.61	Joback Method
cpg	1028.34	J/mol×K	991.11	Joback Method
cpg	1040.18	J/mol×K	1023.61	Joback Method
cpg	1051.01	J/mol×K	1056.11	Joback Method
dvisc	0.0006685	Pa×s	493.05	Joback Method

dvisc	0.0003248	Pa×s	554.39	Joback Method
dvisc	0.0001822	Pa×s	615.74	Joback Method
dvisc	0.0001135	Pa×s	677.09	Joback Method
dvisc	0.0000765	Pa×s	738.43	Joback Method
dvisc	0.0000548	Pa×s	799.77	Joback Method
dvisc	0.0000411	Pa×s	861.12	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=U391597&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