Glutaric acid, 10-chlorodecyl dec-9-enyl ester

Inchi: InChI=1S/C25H45ClO4/c1-2-3-4-5-6-10-13-16-22-29-24(27)19-18-20-25(28)30-23-17-14
InchiKey: USGKYWZAODPYCH-UHFFFAOYSA-N
Formula: C25H45ClO4
SMILES: C=CCCCCCCCCOC(=O)CCCC(=O)OCCCCCCCCCCCl
Mol. weight [g/mol]: 445.07

Physical Properties

Property code	Value	Unit	Source
gf	-232.31	kJ/mol	Joback Method
hf	-939.24	kJ/mol	Joback Method
hfus	69.00	kJ/mol	Joback Method
hvap	93.27	kJ/mol	Joback Method
log10ws	-8.02		Crippen Method
logp	7.519		Crippen Method
mcvol	385.930	ml/mol	McGowan Method
pc	806.62	kPa	Joback Method
rinpol	3264.00		NIST Webbook
tb	958.09	K	Joback Method
tc	1177.94	K	Joback Method
tf	543.99	K	Joback Method
vc	1.514	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1282.02	J/mol×K	958.09	Joback Method
cpg	1301.26	J/mol×K	994.73	Joback Method
cpg	1318.98	J/mol×K	1031.37	Joback Method
cpg	1335.22	J/mol×K	1068.02	Joback Method
cpg	1350.05	J/mol×K	1104.66	Joback Method
cpg	1363.52	J/mol×K	1141.30	Joback Method
cpg	1375.68	J/mol×K	1177.94	Joback Method
dvisc	0.0003698	Pa×s	543.99	Joback Method
dvisc	0.0001789	Pa×s	613.01	Joback Method

dvisc	0.0001003	Pa×s	682.02	Joback Method
dvisc	0.0000625	Pa×s	751.04	Joback Method
dvisc	0.0000422	Pa×s	820.06	Joback Method
dvisc	0.0000303	Pa×s	889.07	Joback Method
dvisc	0.0000228	Pa×s	958.09	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=U359408&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