Glutaric acid, 2,3,5,6-tetrachlorophenyl tridecyl ester

Inchi: InChI=1S/C24H34Cl4O4/c1-2-3-4-5-6-7-8-9-10-11-12-16-31-20(29)14-13-15-21(30)32-24
InchiKey: UQJFNDHAKNBYQU-UHFFFAOYSA-N
Formula: C24H34Cl4O4
SMILES: CCCCCCCCCCCCCOC(=O)CCCC(=O)Oc1c(Cl)c(Cl)cc(Cl)c1Cl
Mol. weight [g/mol]: 528.34

Physical Properties

Property code	Value	Unit	Source
gf	-290.47	kJ/mol	Joback Method
hf	-900.60	kJ/mol	Joback Method
hfus	72.76	kJ/mol	Joback Method
hvap	109.79	kJ/mol	Joback Method
log10ws	-10.09		Crippen Method
logp	9.230		Crippen Method
mcvol	389.100	ml/mol	McGowan Method
pc	914.39	kPa	Joback Method
rinpol	3614.00		NIST Webbook
tb	1097.42	K	Joback Method
tc	1347.10	K	Joback Method
tf	700.74	K	Joback Method
vc	1.516	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1209.22	J/mol×K	1097.42	Joback Method
cpg	1220.88	J/mol×K	1139.03	Joback Method
cpg	1230.82	J/mol×K	1180.65	Joback Method
cpg	1239.09	J/mol×K	1222.26	Joback Method
cpg	1245.73	J/mol×K	1263.87	Joback Method
cpg	1250.80	J/mol×K	1305.49	Joback Method
cpg	1254.34	J/mol×K	1347.10	Joback Method
dvisc	0.0001169	Pa×s	700.74	Joback Method
dvisc	0.0000731	Pa×s	766.85	Joback Method

dvisc	0.0000492	Pa×s	832.97	Joback Method
dvisc	0.0000351	Pa×s	899.08	Joback Method
dvisc	0.0000262	Pa×s	965.19	Joback Method
dvisc	0.0000204	Pa×s	1031.31	Joback Method
dvisc	0.0000163	Pa×s	1097.42	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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=U359328&Units=SI

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