Glutaric acid, di(7-chloroheptyl) ester

Inchi: InChI=1S/C19H34Cl2O4/c20-14-7-3-1-5-9-16-24-18(22)12-11-13-19(23)25-17-10-6-2-4-8
InchiKey: MDBMCUWEYNGULY-UHFFFAOYSA-N
Formula: C19H34Cl2O4
SMILES: O=C(CCCC(=O)OCCCCCCCCl)OCCCCCCCCl
Mol. weight [g/mol]: 397.38

Physical Properties

Property code	Value	Unit	Source
gf	-382.60	kJ/mol	Joback Method
hf	-956.57	kJ/mol	Joback Method
hfus	58.93	kJ/mol	Joback Method
hvap	84.97	kJ/mol	Joback Method
log10ws	-5.81		Crippen Method
logp	5.622		Crippen Method
mcvol	317.930	ml/mol	McGowan Method
pc	1093.54	kPa	Joback Method
rinpol	2857.00		NIST Webbook
rinpol	2857.00		NIST Webbook
tb	861.56	K	Joback Method
tc	1056.00	K	Joback Method
tf	508.05	K	Joback Method
vc	1.246	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	970.07	J/mol×K	861.56	Joback Method
cpg	986.09	J/mol×K	893.97	Joback Method
cpg	1001.04	J/mol×K	926.37	Joback Method
cpg	1014.94	J/mol×K	958.78	Joback Method
cpg	1027.81	J/mol×K	991.19	Joback Method
cpg	1039.68	J/mol×K	1023.59	Joback Method
cpg	1050.57	J/mol×K	1056.00	Joback Method
dvisc	0.0005853	Pa×s	508.05	Joback Method

dvisc	0.0003055	Pa×s	566.97	Joback Method
dvisc	0.0001802	Pa×s	625.89	Joback Method
dvisc	0.0001164	Pa×s	684.80	Joback Method
dvisc	0.0000806	Pa×s	743.72	Joback Method
dvisc	0.0000589	Pa×s	802.64	Joback Method
dvisc	0.0000449	Pa×s	861.56	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=U380507&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