Glutaric acid, di(2-(2-methoxyethyl)hexyl) ester

Inchi: InChI=1S/C23H44O6/c1-5-7-10-20(14-16-26-3)18-28-22(24)12-9-13-23(25)29-19-21(11-

InchiKey: WWGWOAJJOXWCCE-UHFFFAOYSA-N

Formula: C23H44O6

SMILES: CCCCC(CCOC)COC(=O)CCCC(=O)OCC(CCCC)CCOC

Mol. weight [g/mol]: 416.59

Physical Properties

Property code	Value	Unit	Source
gf	-539.94	kJ/mol	Joback Method
hf	-1282.65	kJ/mol	Joback Method
hfus	56.23	kJ/mol	Joback Method
hvap	89.15	kJ/mol	Joback Method
log10ws	-4.87		Crippen Method
logp	4.929		Crippen Method
mcvol	361.550	ml/mol	McGowan Method
pc	890.00	kPa	Joback Method
rinpol	2732.00		NIST Webbook
tb	922.18	K	Joback Method
tc	1130.55	K	Joback Method
tf	507.75	K	Joback Method
vc	1.395	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1219.13	J/mol×K	922.18	Joback Method
cpg	1296.87	J/mol×K	1095.82	Joback Method
cpg	1284.59	J/mol×K	1061.09	Joback Method
cpg	1270.68	J/mol×K	1026.37	Joback Method
cpg	1255.14	J/mol×K	991.64	Joback Method
cpg	1237.96	J/mol×K	956.91	Joback Method
cpg	1307.52	J/mol×K	1130.55	Joback Method
dvisc	0.0000156	Pa×s	922.18	Joback Method
dvisc	0.0000212	Pa×s	853.11	Joback Method

dvisc	0.0000306	Pa×s	784.04	Joback Method
dvisc	0.0000472	Pa×s	714.97	Joback Method
dvisc	0.0000801	Pa×s	645.89	Joback Method
dvisc	0.0001543	Pa×s	576.82	Joback Method
dvisc	0.0003549	Pa×s	507.75	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=U358499&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