Glutaric acid, 2-ethylhexyl diphenylmethyl ester

Inchi: InChI=1S/C26H34O4/c1-3-5-13-21(4-2)20-29-24(27)18-12-19-25(28)30-26(22-14-8-6-9-1
InchiKey: GILRAQLIUAFGEP-UHFFFAOYSA-N
Formula: C26H34O4
SMILES: CCCCC(CC)COC(=O)CCCC(=O)OC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 410.55

Physical Properties

Property code	Value	Unit	Source
gf	-79.86	kJ/mol	Joback Method
hf	-607.07	kJ/mol	Joback Method
hfus	49.71	kJ/mol	Joback Method
hvap	95.56	kJ/mol	Joback Method
log10ws	-6.96		Crippen Method
logp	6.249		Crippen Method
mcvol	344.560	ml/mol	McGowan Method
pc	1153.78	kPa	Joback Method
rinpol	2932.00		NIST Webbook
rinpol	2932.00		NIST Webbook
tb	999.34	K	Joback Method
tc	1227.24	K	Joback Method
tf	549.94	K	Joback Method
vc	1.312	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1139.49	J/mol×K	999.34	Joback Method
cpg	1154.21	J/mol×K	1037.32	Joback Method
cpg	1167.45	J/mol×K	1075.31	Joback Method
cpg	1179.28	J/mol×K	1113.29	Joback Method
cpg	1189.77	J/mol×K	1151.28	Joback Method
cpg	1199.00	J/mol×K	1189.26	Joback Method
cpg	1207.03	J/mol×K	1227.24	Joback Method
dvisc	0.0003730	Pa×s	549.94	Joback Method

dvisc	0.0001688	Pa×s	624.84	Joback Method
dvisc	0.0000905	Pa×s	699.74	Joback Method
dvisc	0.0000548	Pa×s	774.64	Joback Method
dvisc	0.0000362	Pa×s	849.54	Joback Method
dvisc	0.0000256	Pa×s	924.44	Joback Method
dvisc	0.0000190	Pa×s	999.34	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=U393346&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