Glutaric acid, 2-ethylphenyl naphth-2-yl ester

Inchi: InChI=1S/C24H24O4/c1-2-19-8-5-6-11-22(19)28-24(26)13-7-12-23(25)27-17-18-14-15-2
InchiKey: SRAPANQINRXUES-UHFFFAOYSA-N
Formula: C24H24O4
SMILES: CCc1ccccc1OC(=O)CCCC(=O)OCc1ccc2ccccc2c1
Mol. weight [g/mol]: 376.44

Physical Properties

Property code	Value	Unit	Source
gf	-4.43	kJ/mol	Joback Method
hf	-387.10	kJ/mol	Joback Method
hfus	47.81	kJ/mol	Joback Method
hvap	94.85	kJ/mol	Joback Method
log10ws	-7.04		Crippen Method
logp	5.221		Crippen Method
mcvol	296.920	ml/mol	McGowan Method
pc	1534.26	kPa	Joback Method
rinpol	3192.00		NIST Webbook
tb	983.40	K	Joback Method
tc	1219.68	K	Joback Method
tf	615.14	K	Joback Method
vc	1.133	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	932.99	J/mol×K	983.40	Joback Method
cpg	946.02	J/mol×K	1022.78	Joback Method
cpg	957.85	J/mol×K	1062.16	Joback Method
cpg	968.57	J/mol×K	1101.54	Joback Method
cpg	978.26	J/mol×K	1140.92	Joback Method
cpg	987.02	J/mol×K	1180.30	Joback Method
cpg	994.92	J/mol×K	1219.68	Joback Method
dvisc	0.0004158	Pa×s	615.14	Joback Method
dvisc	0.0002682	Pa×s	676.52	Joback Method

dvisc	0.0001861	Pa×s	737.89	Joback Method
dvisc	0.0001366	Pa×s	799.27	Joback Method
dvisc	0.0001047	Pa×s	860.65	Joback Method
dvisc	0.0000832	Pa×s	922.02	Joback Method
dvisc	0.0000680	Pa×s	983.40	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392152&Units=SI
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

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