Glutaric acid, di(2-phenoxyethyl) ester

Inchi: InChI=1S/C21H24O6/c22-20(26-16-14-24-18-8-3-1-4-9-18)12-7-13-21(23)27-17-15-25-1
InchiKey: BXYFAGKNDXOYLC-UHFFFAOYSA-N
Formula: C21H24O6
SMILES: O=C(CCCC(=O)OCCOc1ccccc1)OCCOc1ccccc1
Mol. weight [g/mol]: 372.41

Physical Properties

Property code	Value	Unit	Source
gf	-327.08	kJ/mol	Joback Method
hf	-757.75	kJ/mol	Joback Method
hfus	46.18	kJ/mol	Joback Method
hvap	90.02	kJ/mol	Joback Method
log10ws	-4.02		Crippen Method
logp	3.401		Crippen Method
mcvol	285.850	ml/mol	McGowan Method
pc	1582.23	kPa	Joback Method
rinpol	2949.00		NIST Webbook
rinpol	2949.00		NIST Webbook
tb	930.66	K	Joback Method
tc	1152.50	K	Joback Method
tf	568.05	K	Joback Method
vc	1.079	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	894.98	J/mol×K	930.66	Joback Method
cpg	907.76	J/mol×K	967.63	Joback Method
cpg	919.05	J/mol×K	1004.61	Joback Method
cpg	928.86	J/mol×K	1041.58	Joback Method
cpg	937.21	J/mol×K	1078.55	Joback Method
cpg	944.10	J/mol×K	1115.53	Joback Method
cpg	949.56	J/mol×K	1152.50	Joback Method
dvisc	0.0002630	Pa×s	568.05	Joback Method

dvisc	0.0001495	Pa×s	628.49	Joback Method
dvisc	0.0000939	Pa×s	688.92	Joback Method
dvisc	0.0000635	Pa×s	749.36	Joback Method
dvisc	0.0000456	Pa×s	809.79	Joback Method
dvisc	0.0000342	Pa×s	870.23	Joback Method
dvisc	0.0000267	Pa×s	930.66	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U376923&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