Glutaric acid, pentyl 1-phenylpropyl ester

Inchi: InChI=1S/C19H28O4/c1-3-5-9-15-22-18(20)13-10-14-19(21)23-17(4-2)16-11-7-6-8-12-16
InchiKey: VAICUYPEIOZFIE-UHFFFAOYSA-N
Formula: C19H28O4
SMILES: CCCCCOC(=O)CCCC(=O)OC(CC)c1ccccc1
Mol. weight [g/mol]: 320.42

Physical Properties

Property code	Value	Unit	Source
gf	-248.77	kJ/mol	Joback Method
hf	-693.84	kJ/mol	Joback Method
hfus	41.06	kJ/mol	Joback Method
hvap	78.09	kJ/mol	Joback Method
log10ws	-5.06		Crippen Method
logp	4.585		Crippen Method
mcvol	269.690	ml/mol	McGowan Method
pc	1466.85	kPa	Joback Method
rinpol	2274.00		NIST Webbook
rinpol	2274.00		NIST Webbook
tb	812.94	K	Joback Method
tc	1013.68	K	Joback Method
tf	459.63	K	Joback Method
vc	1.034	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	820.24	J/mol×K	812.94	Joback Method
cpg	890.09	J/mol×K	980.22	Joback Method
cpg	878.26	J/mol×K	946.77	Joback Method
cpg	865.38	J/mol×K	913.31	Joback Method
cpg	851.44	J/mol×K	879.85	Joback Method
cpg	836.40	J/mol×K	846.40	Joback Method
cpg	900.91	J/mol×K	1013.68	Joback Method
dvisc	0.0000572	Pa×s	812.94	Joback Method

dvisc	0.0000756	Pa×s	754.05	Joback Method
dvisc	0.0001048	Pa×s	695.17	Joback Method
dvisc	0.0001544	Pa×s	636.28	Joback Method
dvisc	0.0002460	Pa×s	577.40	Joback Method
dvisc	0.0004358	Pa×s	518.51	Joback Method
dvisc	0.0008938	Pa×s	459.63	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=U358951&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