Glutaric acid, 2-fluorophenyl diphenylmethyl ester

Inchi: InChI=1S/C24H21FO4/c25-20-14-7-8-15-21(20)28-22(26)16-9-17-23(27)29-24(18-10-3-1

InchiKey: BOMPRRSLWOJEHC-UHFFFAOYSA-N

Formula: C24H21FO4

SMILES: O=C(CCCC(=O)OC(c1ccccc1)c1ccccc1)Oc1ccccc1F

Mol. weight [g/mol]: 392.42

Physical Properties

Property code	Value	Unit	Source
gf	-186.29	kJ/mol	Joback Method
hf	-531.56	kJ/mol	Joback Method
hfus	44.78	kJ/mol	Joback Method
hvap	93.62	kJ/mol	Joback Method
log10ws	-6.44		Crippen Method
logp	5.234		Crippen Method
mcvol	294.390	ml/mol	McGowan Method
pc	1614.17	kPa	Joback Method
rinpol	2954.00		NIST Webbook
rinpol	2954.00		NIST Webbook
tb	984.95	K	Joback Method
tc	1226.30	K	Joback Method
tf	581.93	K	Joback Method
vc	1.115	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	916.98	J/mol×K	984.95	Joback Method
cpg	928.71	J/mol×K	1025.18	Joback Method
cpg	939.00	J/mol×K	1065.40	Joback Method
cpg	947.94	J/mol×K	1105.63	Joback Method
cpg	955.60	J/mol×K	1145.85	Joback Method
cpg	962.07	J/mol×K	1186.08	Joback Method
cpg	967.42	J/mol×K	1226.30	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U393345&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
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