Glutaric acid, 2-methylpent-3-yl diphenylmethyl ester

Inchi: InChI=1S/C24H30O4/c1-4-21(18(2)3)27-22(25)16-11-17-23(26)28-24(19-12-7-5-8-13-19)

InchiKey: CFFHYFQSHRAARU-UHFFFAOYSA-N

Formula: C24H30O4

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

Mol. weight [g/mol]: 382.49

Physical Properties

Property code	Value	Unit	Source
gf	-99.14	kJ/mol	Joback Method
hf	-571.07	kJ/mol	Joback Method
hfus	41.00	kJ/mol	Joback Method
hvap	90.72	kJ/mol	Joback Method
log10ws	-6.23		Crippen Method
logp	5.467		Crippen Method
mcvol	316.380	ml/mol	McGowan Method
pc	1328.10	kPa	Joback Method
rinpol	2687.00		NIST Webbook
rinpol	2687.00		NIST Webbook
tb	953.14	K	Joback Method
tc	1180.00	K	Joback Method
tf	512.40	K	Joback Method
vc	1.194	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1019.06	J/mol×K	953.14	Joback Method
cpg	1033.80	J/mol×K	990.95	Joback Method
cpg	1047.09	J/mol×K	1028.76	Joback Method
cpg	1058.98	J/mol×K	1066.57	Joback Method
cpg	1069.53	J/mol×K	1104.38	Joback Method
cpg	1078.82	J/mol×K	1142.19	Joback Method
cpg	1086.89	J/mol×K	1180.00	Joback Method
dvisc	0.0005477	Pa×s	512.40	Joback Method

dvisc	0.0002333	Pa×s	585.86	Joback Method
dvisc	0.0001202	Pa×s	659.31	Joback Method
dvisc	0.0000707	Pa×s	732.77	Joback Method
dvisc	0.0000459	Pa×s	806.23	Joback Method
dvisc	0.0000320	Pa×s	879.68	Joback Method
dvisc	0.0000235	Pa×s	953.14	Joback Method

Sources

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=U393341&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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