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

Inchi: InChI=1S/C23H28O4/c1-17(2)18(3)26-21(24)15-10-16-22(25)27-23(19-11-6-4-7-12-19)2
InchiKey: ASVPDTLBQOYMPI-UHFFFAOYSA-N
Formula: C23H28O4
SMILES: CC(C)C(C)OC(=O)CCCC(=O)OC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 368.47

Physical Properties

Property code	Value	Unit	Source
gf	-107.56	kJ/mol	Joback Method
hf	-550.43	kJ/mol	Joback Method
hfus	38.41	kJ/mol	Joback Method
hvap	88.49	kJ/mol	Joback Method
log10ws	-5.81		Crippen Method
logp	5.077		Crippen Method
mcvol	302.290	ml/mol	McGowan Method
pc	1426.15	kPa	Joback Method
rinpol	2605.00		NIST Webbook
rinpol	2605.00		NIST Webbook
tb	930.26	K	Joback Method
tc	1157.35	K	Joback Method
tf	501.13	K	Joback Method
vc	1.137	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	959.43	J/mol×K	930.26	Joback Method
cpg	1019.43	J/mol×K	1119.50	Joback Method
cpg	1010.08	J/mol×K	1081.65	Joback Method
cpg	999.47	J/mol×K	1043.80	Joback Method
cpg	987.53	J/mol×K	1005.96	Joback Method
cpg	974.20	J/mol×K	968.11	Joback Method
cpg	1027.57	J/mol×K	1157.35	Joback Method
dvisc	0.0000274	Pa×s	930.26	Joback Method

dvisc	0.0000371	Pa×s	858.74	Joback Method
dvisc	0.0000531	Pa×s	787.22	Joback Method
dvisc	0.0000817	Pa×s	715.70	Joback Method
dvisc	0.0001382	Pa×s	644.17	Joback Method
dvisc	0.0002669	Pa×s	572.65	Joback Method
dvisc	0.0006217	Pa×s	501.13	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=U393340&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