Glutaric acid, 4-acetylphenyl pentyl ester

Inchi: InChI=1S/C18H24O5/c1-3-4-5-13-22-17(20)7-6-8-18(21)23-16-11-9-15(10-12-16)14(2)19

InchiKey: QSXYTWYYNLEUJQ-UHFFFAOYSA-N

Formula: C18H24O5

SMILES: CCCCCOC(=O)CCCC(=O)Oc1ccc(C(C)=O)cc1

Mol. weight [g/mol]: 320.38

Physical Properties

Property code	Value	Unit	Source
gf	-393.30	kJ/mol	Joback Method
hf	-791.97	kJ/mol	Joback Method
hfus	43.20	kJ/mol	Joback Method
hvap	83.66	kJ/mol	Joback Method
log10ws	-4.66		Crippen Method
logp	3.698		Crippen Method
mcvol	257.170	ml/mol	McGowan Method
pc	1632.49	kPa	Joback Method
rinpol	2561.00		NIST Webbook
tb	849.35	K	Joback Method
tc	1056.36	K	Joback Method
tf	525.81	K	Joback Method
vc	0.990	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	777.63	J/mol×K	849.35	Joback Method
cpg	791.56	J/mol×K	883.85	Joback Method
cpg	804.40	J/mol×K	918.35	Joback Method
cpg	816.14	J/mol×K	952.85	Joback Method
cpg	826.81	J/mol×K	987.35	Joback Method
cpg	836.43	J/mol×K	1021.86	Joback Method
cpg	845.00	J/mol×K	1056.36	Joback Method
dvisc	0.0005988	Pa×s	525.81	Joback Method
dvisc	0.0003541	Pa×s	579.73	Joback Method

dvisc	0.0002289	Pa×s	633.66	Joback Method
dvisc	0.0001585	Pa×s	687.58	Joback Method
dvisc	0.0001158	Pa×s	741.50	Joback Method
dvisc	0.0000882	Pa×s	795.43	Joback Method
dvisc	0.0000696	Pa×s	849.35	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=U359265&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