Glutaric acid, hexyl 3-phenylpropyl ester

Inchi: InChI=1S/C20H30O4/c1-2-3-4-8-16-23-19(21)14-9-15-20(22)24-17-10-13-18-11-6-5-7-12
InchiKey: PWUCASNGNDJJOM-UHFFFAOYSA-N
Formula: C20H30O4
SMILES: CCCCCCOC(=O)CCCC(=O)OCCCc1ccccc1
Mol. weight [g/mol]: 334.45

Physical Properties

Property code	Value	Unit	Source
gf	-237.91	kJ/mol	Joback Method
hf	-709.20	kJ/mol	Joback Method
hfus	47.17	kJ/mol	Joback Method
hvap	80.70	kJ/mol	Joback Method
log10ws	-5.02		Crippen Method
logp	4.456		Crippen Method
mcvol	283.780	ml/mol	McGowan Method
pc	1356.63	kPa	Joback Method
rinpol	2544.00		NIST Webbook
rinpol	2544.00		NIST Webbook
tb	836.26	K	Joback Method
tc	1035.40	K	Joback Method
tf	485.90	K	Joback Method
vc	1.095	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	878.33	J/mol×K	836.26	Joback Method
cpg	894.55	J/mol×K	869.45	Joback Method
cpg	909.64	J/mol×K	902.64	Joback Method
cpg	923.63	J/mol×K	935.83	Joback Method
cpg	936.55	J/mol×K	969.02	Joback Method
cpg	948.42	J/mol×K	1002.21	Joback Method
cpg	959.28	J/mol×K	1035.40	Joback Method
dvisc	0.0006973	Pa×s	485.90	Joback Method

dvisc	0.0003625	Pa×s	544.29	Joback Method
dvisc	0.0002139	Pa×s	602.69	Joback Method
dvisc	0.0001385	Pa×s	661.08	Joback Method
dvisc	0.0000963	Pa×s	719.47	Joback Method
dvisc	0.0000707	Pa×s	777.87	Joback Method
dvisc	0.0000542	Pa×s	836.26	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360135&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
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