Glutaric acid, 5-methoxy-3-phenylpentyl propyl ester

Inchi: InChI=1S/C20H30O5/c1-3-14-24-19(21)10-7-11-20(22)25-16-13-18(12-15-23-2)17-8-5-4

InchiKey: JYMZUZJYEGZSOJ-UHFFFAOYSA-N

Formula: C20H30O5

SMILES: CCCOC(=O)CCCC(=O)OCCC(CCOC)c1ccccc1

Mol. weight [g/mol]: 350.45

Physical Properties

Property code	Value	Unit	Source
gf	-345.35	kJ/mol	Joback Method
hf	-846.70	kJ/mol	Joback Method
hfus	44.84	kJ/mol	Joback Method
hvap	82.72	kJ/mol	Joback Method
log10ws	-4.07		Crippen Method
logp	3.864		Crippen Method
mcvol	289.650	ml/mol	McGowan Method
pc	1347.68	kPa	Joback Method
rinpol	2506.00		NIST Webbook
rinpol	2506.00		NIST Webbook
tb	858.24	K	Joback Method
tc	1060.35	K	Joback Method
tf	493.13	K	Joback Method
vc	1.107	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	908.30	J/mol×K	858.24	Joback Method
cpg	975.31	J/mol×K	1026.67	Joback Method
cpg	964.31	J/mol×K	992.98	Joback Method
cpg	952.12	J/mol×K	959.30	Joback Method
cpg	938.74	J/mol×K	925.61	Joback Method
cpg	924.14	J/mol×K	891.93	Joback Method
cpg	985.15	J/mol×K	1060.35	Joback Method
dvisc	0.0000371	Pa×s	858.24	Joback Method

dvisc	0.0000490	Pa×s	797.39	Joback Method
dvisc	0.0000677	Pa×s	736.54	Joback Method
dvisc	0.0000992	Pa×s	675.68	Joback Method
dvisc	0.0001568	Pa×s	614.83	Joback Method
dvisc	0.0002740	Pa×s	553.98	Joback Method
dvisc	0.0005494	Pa×s	493.13	Joback Method

Sources

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=U359528&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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