Glutaric acid, di(2,4-dimethylpent-3-yl) ester

Inchi: InChI=1S/C19H36O4/c1-12(2)18(13(3)4)22-16(20)10-9-11-17(21)23-19(14(5)6)15(7)8/h1
InchiKey: JDNMPNLUFYQEHO-UHFFFAOYSA-N
Formula: C19H36O4
SMILES: CC(C)C(OC(=O)CCCC(=O)OC(C(C)C)C(C)C)C(C)C
Mol. weight [g/mol]: 328.49

Physical Properties

Property code	Value	Unit	Source
gf	-373.38	kJ/mol	Joback Method
hf	-956.77	kJ/mol	Joback Method
hfus	29.40	kJ/mol	Joback Method
hvap	73.87	kJ/mol	Joback Method
log10ws	-4.76		Crippen Method
logp	4.604		Crippen Method
mcvol	293.450	ml/mol	McGowan Method
pc	1187.42	kPa	Joback Method
rinpol	1996.00		NIST Webbook
tb	784.06	K	Joback Method
tc	973.04	K	Joback Method
tf	358.21	K	Joback Method
vc	1.111	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	911.80	J/mol×K	784.06	Joback Method
cpg	930.47	J/mol×K	815.56	Joback Method
cpg	948.01	J/mol×K	847.05	Joback Method
cpg	964.45	J/mol×K	878.55	Joback Method
cpg	979.81	J/mol×K	910.05	Joback Method
cpg	994.10	J/mol×K	941.55	Joback Method
cpg	1007.33	J/mol×K	973.04	Joback Method
dvisc	0.0038652	Pa×s	358.21	Joback Method
dvisc	0.0009398	Pa×s	429.19	Joback Method

dvisc	0.0003414	Pa×s	500.16	Joback Method
dvisc	0.0001595	Pa×s	571.13	Joback Method
dvisc	0.0000882	Pa×s	642.11	Joback Method
dvisc	0.0000548	Pa×s	713.08	Joback Method
dvisc	0.0000372	Pa×s	784.06	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U359490&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

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