Glutaric acid, decyl tetrahydrofurfuryl ester

Inchi: InChI=1S/C20H36O5/c1-2-3-4-5-6-7-8-9-15-24-19(21)13-10-14-20(22)25-17-18-12-11-16
InchiKey: XKBURWMPCQZQAH-UHFFFAOYSA-N
Formula: C20H36O5
SMILES: CCCCCCCCCCOC(=O)CCCC(=O)OCC1CCCO1
Mol. weight [g/mol]: 356.50

Physical Properties

Property code	Value	Unit	Source
gf	-399.89	kJ/mol	Joback Method
hf	-1017.25	kJ/mol	Joback Method
hfus	55.04	kJ/mol	Joback Method
hvap	83.19	kJ/mol	Joback Method
log10ws	-5.01		Crippen Method
logp	4.563		Crippen Method
mcvol	302.550	ml/mol	McGowan Method
pc	1209.83	kPa	Joback Method
rinpol	2636.00		NIST Webbook
rinpol	2636.00		NIST Webbook
tb	851.81	K	Joback Method
tc	1047.64	K	Joback Method
tf	496.95	K	Joback Method
vc	1.165	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	997.21	J/mol×K	851.81	Joback Method
cpg	1015.15	J/mol×K	884.45	Joback Method
cpg	1031.86	J/mol×K	917.09	Joback Method
cpg	1047.38	J/mol×K	949.73	Joback Method
cpg	1061.73	J/mol×K	982.37	Joback Method
cpg	1074.94	J/mol×K	1015.00	Joback Method
cpg	1087.03	J/mol×K	1047.64	Joback Method
dvisc	0.0008884	Pa×s	496.95	Joback Method

dvisc	0.0004608	Pa×s	556.09	Joback Method
dvisc	0.0002711	Pa×s	615.24	Joback Method
dvisc	0.0001751	Pa×s	674.38	Joback Method
dvisc	0.0001213	Pa×s	733.52	Joback Method
dvisc	0.0000888	Pa×s	792.67	Joback Method
dvisc	0.0000679	Pa×s	851.81	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=U359666&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