Glutaric acid, dec-2-yl 2,2,3,4,4,4-hexafluorobutyl ester

Inchi: InChI=1S/C19H30F6O4/c1-3-4-5-6-7-8-10-14(2)29-16(27)12-9-11-15(26)28-13-18(21,22

InchiKey: HMZDYBJDPWPABY-UHFFFAOYSA-N

Formula: C19H30F6O4

SMILES: CCCCCCCCC(C)OC(=O)CCCC(=O)OCC(F)(F)C(F)C(F)(F)F

Mol. weight [g/mol]: 436.43

Physical Properties

Property code	Value	Unit	Source
gf	-1526.80	kJ/mol	Joback Method
hf	-2129.81	kJ/mol	Joback Method
hfus	47.15	kJ/mol	Joback Method
hvap	67.93	kJ/mol	Joback Method
log10ws	-6.55		Crippen Method
logp	5.918		Crippen Method
mcvol	304.070	ml/mol	McGowan Method
pc	997.65	kPa	Joback Method
rinpol	1918.00		NIST Webbook
rinpol	1918.00		NIST Webbook
tb	774.98	K	Joback Method
tc	949.46	K	Joback Method
tf	426.59	K	Joback Method
vc	1.222	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	957.74	J/mol×K	774.98	Joback Method
cpg	974.04	J/mol×K	804.06	Joback Method
cpg	989.40	J/mol×K	833.14	Joback Method
cpg	1003.84	J/mol×K	862.22	Joback Method
cpg	1017.40	J/mol×K	891.30	Joback Method
cpg	1030.14	J/mol×K	920.38	Joback Method
cpg	1042.07	J/mol×K	949.46	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=U393694&Units=SI

Legend

cpg:	Ideal gas heat capacity
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