Glutaric acid, 2-norbornyl 2,2,3,3,4,4,5,5-octafluoropentyl ester

Inchi: InChI=1S/C17H20F8O4/c18-14(19)16(22,23)17(24,25)15(20,21)8-28-12(26)2-1-3-13(27)
InchiKey: RMBBOBVGHARMDC-UHFFFAOYSA-N
Formula: C17H20F8O4
SMILES: O=C(CCCC(=O)OC1CC2CCC1C2)OCC(F)(F)C(F)(F)C(F)(F)C(F)F
Mol. weight [g/mol]: 440.33

Physical Properties

Property code	Value	Unit	Source
gf	-1826.29	kJ/mol	Joback Method
hf	-2365.12	kJ/mol	Joback Method
hfus	39.48	kJ/mol	Joback Method
hvap	60.62	kJ/mol	Joback Method
log10ws	-5.34		Crippen Method
logp	4.603		Crippen Method
mcvol	257.710	ml/mol	McGowan Method
pc	1274.60	kPa	Joback Method
rinpol	1873.00		NIST Webbook
rinpol	1873.00		NIST Webbook
tb	738.05	K	Joback Method
tc	913.76	K	Joback Method
tf	450.77	K	Joback Method
vc	1.046	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	834.53	J/mol×K	738.05	Joback Method
cpg	849.61	J/mol×K	767.34	Joback Method
cpg	863.71	J/mol×K	796.62	Joback Method
cpg	876.92	J/mol×K	825.91	Joback Method
cpg	889.31	J/mol×K	855.19	Joback Method
cpg	900.95	J/mol×K	884.48	Joback Method
cpg	911.90	J/mol×K	913.76	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405484&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
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