2-(2-(2-(2-decyloxy-ethoxy)-ethoxy)-ethoxy)-ethan TFA

InChI: InChI=1S/C20H37F3O6/c1-2-3-4-5-6-7-8-9-10-25-11-12-26-13-14-27-15-16-28-17-18-29

InchiKey: WWXQGPIMGLCDEB-UHFFFAOYSA-N

Formula: C20H37F3O6

SMILES: CCCCCCCCCCOCCOCCOCCOCCOC(=O)C(F)(F)F

Mol. weight [g/mol]: 430.50

Physical Properties

Property code	Value	Unit	Source
gf	-1117.99	kJ/mol	Joback Method
hf	-1826.89	kJ/mol	Joback Method
hfus	56.92	kJ/mol	Joback Method
hvap	75.16	kJ/mol	Joback Method
log10ws	-4.07		Crippen Method
logp	4.299		Crippen Method
mcvol	328.890	ml/mol	McGowan Method
pc	931.78	kPa	Joback Method
rinpol	2326.00		NIST Webbook
rinpol	2326.00		NIST Webbook
tb	817.55	K	Joback Method
tc	1001.18	K	Joback Method
tf	480.43	K	Joback Method
vc	1.294	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1062.57	J/mol×K	817.55	Joback Method
cpg	1081.03	J/mol×K	848.16	Joback Method
cpg	1098.32	J/mol×K	878.76	Joback Method
cpg	1114.44	J/mol×K	909.37	Joback Method
cpg	1129.39	J/mol×K	939.97	Joback Method
cpg	1143.18	J/mol×K	970.58	Joback Method
cpg	1155.81	J/mol×K	1001.18	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=R184228&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
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