2-(2-(2-(2-(2-decyloxy-ethoxy)-ethoxy)-ethoxy)-eth
TFA

InChI: InChI=1S/C22H41F3O7/c1-2-3-4-5-6-7-8-9-10-27-11-12-28-13-14-29-15-16-30-17-18-31
InchiKey: WALCZMCTSWITIL-UHFFFAOYSA-N
Formula: C22H41F3O7
SMILES: CCCCCCCCCCOCCOCCOCCOCCOCCOC(=O)C(F)(F)F
Mol. weight [g/mol]: 474.55

Physical Properties

Property code	Value	Unit	Source
gf	-1206.15	kJ/mol	Joback Method
hf	-2000.39	kJ/mol	Joback Method
hfus	63.29	kJ/mol	Joback Method
hvap	82.02	kJ/mol	Joback Method
log10ws	-3.99		Crippen Method
logp	4.316		Crippen Method
mcvol	362.940	ml/mol	McGowan Method
pc	823.37	kPa	Joback Method
rinpol	2597.00		NIST Webbook
rinpol	2597.00		NIST Webbook
tb	885.73	K	Joback Method
tc	1090.83	K	Joback Method
tf	525.20	K	Joback Method
vc	1.425	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1218.27	J/mol×K	885.73	Joback Method
cpg	1237.78	J/mol×K	919.91	Joback Method
cpg	1255.64	J/mol×K	954.10	Joback Method
cpg	1271.85	J/mol×K	988.28	Joback Method
cpg	1286.41	J/mol×K	1022.47	Joback Method
cpg	1299.33	J/mol×K	1056.65	Joback Method
cpg	1310.60	J/mol×K	1090.83	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R184144&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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