2-[2-[2-[2-[2-[2-[2-[2-(2-Methoxyethoxy)ethoxy]eth
2,2,3,3,3-pentafluoropropanoate

Othernames: Nonaethylene glycol monomethyl ether, pentafluoropropionate
3,6,9,12,15,18,21,24,27-Nonaoxaoctacos-1-yl pentafluoropropionate

Inchi: InChI=1S/C22H39F5O11/c1-29-2-3-30-4-5-31-6-7-32-8-9-33-10-11-34-12-13-35-14-15-3

InchiKey: RQDSEXSZBVKAIM-UHFFFAOYSA-N

Formula: C22H39F5O11

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

Mol. weight [g/mol]: 574.53

Physical Properties

Property code	Value	Unit	Source
gf	-2012.93	kJ/mol	Joback Method
hf	-2930.24	kJ/mol	Joback Method
hfus	66.79	kJ/mol	Joback Method
hvap	88.73	kJ/mol	Joback Method
log10ws	-0.66		Crippen Method
logp	1.506		Crippen Method
mcvol	389.960	ml/mol	McGowan Method
pc	761.42	kPa	Joback Method
rinpol	2747.00		NIST Webbook
tb	970.72	K	Joback Method
tc	1220.59	K	Joback Method
tf	617.72	K	Joback Method
vc	1.522	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1354.16	J/mol×K	970.72	Joback Method
cpg	1371.46	J/mol×K	1012.37	Joback Method
cpg	1385.71	J/mol×K	1054.01	Joback Method
cpg	1396.85	J/mol×K	1095.66	Joback Method
cpg	1404.83	J/mol×K	1137.30	Joback Method
cpg	1409.59	J/mol×K	1178.95	Joback Method
cpg	1411.06	J/mol×K	1220.59	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U351975&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