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

Othernames: Heptaethylene glycol monomethyl ether, pentafluoropropionate
3,6,9,12,15,18,21-Heptaoxadocos-1-yl pentafluoropropionate

Inchi: InChI=1S/C18H31F5O9/c1-25-2-3-26-4-5-27-6-7-28-8-9-29-10-11-30-12-13-31-14-15-32

InchiKey: QDKUWQICCKHTRF-UHFFFAOYSA-N

Formula: C18H31F5O9

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

Mol. weight [g/mol]: 486.43

Physical Properties

Property code	Value	Unit	Source
gf	-1836.61	kJ/mol	Joback Method
hf	-2583.24	kJ/mol	Joback Method
hfus	54.05	kJ/mol	Joback Method
hvap	75.01	kJ/mol	Joback Method
log10ws	-0.81		Crippen Method
logp	1.473		Crippen Method
mcvol	321.860	ml/mol	McGowan Method
pc	972.91	kPa	Joback Method
rinpol	2240.40		NIST Webbook
tb	834.36	K	Joback Method
tc	1023.25	K	Joback Method
tf	528.18	K	Joback Method
vc	1.262	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1050.89	J/mol×K	834.36	Joback Method
cpg	1067.48	J/mol×K	865.84	Joback Method
cpg	1082.76	J/mol×K	897.32	Joback Method
cpg	1096.70	J/mol×K	928.81	Joback Method
cpg	1109.31	J/mol×K	960.29	Joback Method
cpg	1120.56	J/mol×K	991.77	Joback Method
cpg	1130.44	J/mol×K	1023.25	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=U351973&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