2-[2-[2-[2-[2-[2-[2-[2-(2,2,3,3,3-Pentafluoropropano
2,2,3,3,3-pentafluoropropanoate

Othernames: 26,26,27,27,27-Pentafluoro-25-oxo-3,6,9,12,15,18,21,24-octaoxaheptacos-1-yl pentafluoropropanoate
Octaethylene glycol, bis(pentafluoropropionate)

Inchi: InChI=1S/C22H32F10O11/c23-19(24,21(27,28)29)17(33)42-15-13-40-11-9-38-7-5-36-3-1

InchiKey: FVAIFCAWJMCJME-UHFFFAOYSA-N

Formula: C22H32F10O11

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

Mol. weight [g/mol]: 662.47

Physical Properties

Property code	Value	Unit	Source
gf	-3005.22	kJ/mol	Joback Method
hf	-3908.65	kJ/mol	Joback Method
hfus	67.77	kJ/mol	Joback Method
hvap	86.39	kJ/mol	Joback Method
log10ws	-2.32		Crippen Method
logp	2.584		Crippen Method
mcvol	394.510	ml/mol	McGowan Method
pc	718.37	kPa	Joback Method
rinpol	2412.50		NIST Webbook
tb	992.06	K	Joback Method
tc	1267.62	K	Joback Method
tf	653.21	K	Joback Method
vc	1.577	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1372.51	J/mol×K	992.06	Joback Method
cpg	1388.19	J/mol×K	1037.99	Joback Method
cpg	1400.78	J/mol×K	1083.91	Joback Method
cpg	1410.35	J/mol×K	1129.84	Joback Method
cpg	1416.93	J/mol×K	1175.76	Joback Method
cpg	1420.58	J/mol×K	1221.69	Joback Method
cpg	1421.35	J/mol×K	1267.62	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U351994&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