2-[2-[2-[2-[2-[2-[2-[2-[2-[2-[2-(2-Methoxyethoxy)eth
2,2,2-trifluoroacetate

Othernames: Dodecaethylene glycol monomethyl ether, trifluoroacetate
3,6,9,12,15,18,21,24,27,30,33,36-Dodecaoxaheptatriacont-1-yl trifluoroacetate
Inchi: InChI=1S/C27H51F3O14/c1-32-2-3-33-4-5-34-6-7-35-8-9-36-10-11-37-12-13-38-14-15-3
InchiKey: RAECLJICMKGVMH-UHFFFAOYSA-N
Formula: C27H51F3O14
SMILES: COCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOC(=O)C(F)(F)F
Mol. weight [g/mol]: 656.68

Physical Properties

Property code	Value	Unit	Source
gf	-1899.05	kJ/mol	Joback Method
hf	-3029.13	kJ/mol	Joback Method
hfus	84.55	kJ/mol	Joback Method
hvap	110.02	kJ/mol	Joback Method
log10ws	0.30		Crippen Method
logp	0.921		Crippen Method
mcvol	474.480	ml/mol	McGowan Method
pc	599.55	kPa	Joback Method
rinpol	3542.50		NIST Webbook
tb	1157.07	K	Joback Method
tc	1568.89	K	Joback Method
tf	737.16	K	Joback Method
vc	1.831	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1713.46	J/mol×K	1157.07	Joback Method
cpg	1714.79	J/mol×K	1225.71	Joback Method
cpg	1703.02	J/mol×K	1294.34	Joback Method
cpg	1677.51	J/mol×K	1362.98	Joback Method
cpg	1637.66	J/mol×K	1431.62	Joback Method
cpg	1582.82	J/mol×K	1500.26	Joback Method
cpg	1512.37	J/mol×K	1568.89	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=U351964&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

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