

2-[2-[2-[2-[2-[2-[2-(2,2,2-Trifluoroacetyl)oxyethoxy]oxy]oxy]oxy]oxy]oxy]oxy-2,2,2-trifluoroacetate

Other names: Octaethylene glycol bis(trifluoroacetate)
26,26,26-Trifluoro-25-oxo-3,6,9,12,15,18,21,24-octaohexacos-1-yl trifluoroacetate
Inchi: InChI=1S/C20H32F6O11/c21-19(22,23)17(27)36-15-13-34-11-9-32-7-5-30-3-1-29-2-4-31
InchiKey: OUCQBZQZSJUTSF-UHFFFAOYSA-N
Formula: C20H32F6O11
SMILES: O=C(OCCOCCOCCOCCOCCOCCOCCOCCOC(=O)C(F)(F)F)C(F)(F)F
Mol. weight [g/mol]: 562.45

Physical Properties

Property code	Value	Unit	Source
gf	-2248.50	kJ/mol	Joback Method
hf	-3065.43	kJ/mol	Joback Method
hfus	65.10	kJ/mol	Joback Method
hvap	87.80	kJ/mol	Joback Method
log10ws	-0.86		Crippen Method
logp	1.314		Crippen Method
mcvol	359.250	ml/mol	McGowan Method
pc	866.58	kPa	Joback Method
rinpol	2428.70		NIST Webbook
tb	955.68	K	Joback Method
tc	1193.63	K	Joback Method
tf	623.47	K	Joback Method
vc	1.415	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1224.41	J/mol×K	955.68	Joback Method
cpg	1239.44	J/mol×K	995.34	Joback Method
cpg	1251.99	J/mol×K	1035.00	Joback Method
cpg	1262.02	J/mol×K	1074.65	Joback Method
cpg	1269.48	J/mol×K	1114.31	Joback Method
cpg	1274.34	J/mol×K	1153.97	Joback Method
cpg	1276.55	J/mol×K	1193.63	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U351947&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.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
hvac:	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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