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Other names:

Decaethylene glycol bis(pentafluoropropanoate), 18,21,24,27,30-decaoxatritriacont-1-yl pentafluoropropanoate

Inchi: InChI=1S/C26H40F10O13/c27-23(28,25(31,32)33)21(37)48-19-17-46-15-13-44-11-9-42-4
InchiKey: CBCNSWUAVXZPHS-UHFFFAOYSA-N
Formula: C26H40F10O13
SMILES: O=C(OCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOC(=O)C(F)(F)C(F)(F)F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 750.57

Physical Properties

Property code	Value	Unit	Source
gf	-3181.54	kJ/mol	Joback Method
hf	-4255.65	kJ/mol	Joback Method
hfus	80.51	kJ/mol	Joback Method
hvap	100.12	kJ/mol	Joback Method
log10ws	-2.17		Crippen Method
logp	2.617		Crippen Method
mcvol	462.610	ml/mol	McGowan Method
pc	580.92	kPa	Joback Method
rinpol	2894.70		NIST Webbook
tb	1128.42	K	Joback Method
tc	1545.12	K	Joback Method
tf	742.75	K	Joback Method
vc	1.837	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1660.15	J/molxK	1128.42	Joback Method
cpg	1669.94	J/molxK	1197.87	Joback Method
cpg	1670.98	J/molxK	1267.32	Joback Method
cpg	1663.29	J/molxK	1336.77	Joback Method
cpg	1646.93	J/molxK	1406.22	Joback Method
cpg	1621.94	J/molxK	1475.67	Joback Method
cpg	1588.35	J/molxK	1545.12	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=U351992&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.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
h vap:	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
r in pol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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