2-(2-(2-(2-(2-(2-(2-decyloxy-ethoxy)-ethoxy)-ethoxy)-ethoxy)-ethoxy)-ethoxy)-acetate

Inchi: InChI=1S/C26H52O9/c1-3-4-5-6-7-8-9-10-11-28-12-13-29-14-15-30-16-17-31-18-19-32-2

InchiKey: IWUMFFZTOFKWPR-UHFFFAOYSA-N

Formula: C26H52O9

SMILES: CCCCCCCCCCOCCOCCOCCOCCOCCOCCOCCOC(C)=O

Mol. weight [g/mol]: 508.69

Physical Properties

Property code	Value	Unit	Source
gf	-800.88	kJ/mol	Joback Method
hf	-1750.31	kJ/mol	Joback Method
hfus	74.20	kJ/mol	Joback Method
hvap	99.50	kJ/mol	Joback Method
log10ws	-3.18		Crippen Method
logp	3.806		Crippen Method
mcvol	425.730	ml/mol	McGowan Method
pc	697.28	kPa	Joback Method
rinpol	3415.20		NIST Webbook
tb	1027.51	K	Joback Method
tc	1294.98	K	Joback Method
tf	610.55	K	Joback Method
vc	1.641	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1511.44	J/mol×K	1027.51	Joback Method
cpg	1568.35	J/mol×K	1250.40	Joback Method
cpg	1564.94	J/mol×K	1205.82	Joback Method
cpg	1557.47	J/mol×K	1161.24	Joback Method
cpg	1546.01	J/mol×K	1116.67	Joback Method
cpg	1530.64	J/mol×K	1072.09	Joback Method
cpg	1567.60	J/mol×K	1294.98	Joback Method
dvisc	0.0000036	Pa×s	1027.51	Joback Method
dvisc	0.0000047	Pa×s	958.02	Joback Method

dvisc	0.0000065	Pa×s	888.52	Joback Method
dvisc	0.0000095	Pa×s	819.03	Joback Method
dvisc	0.0000149	Pa×s	749.54	Joback Method
dvisc	0.0000257	Pa×s	680.04	Joback Method
dvisc	0.0000501	Pa×s	610.55	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=R183983&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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