(Z)-1,3-Dimethoxypropan-2-yl tetracos-15-enoate

Inchi: InChI=1S/C29H56O4/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

InchiKey: UZIZTVFZRAOKRE-QXMHVHEDSA-N

Formula: C29H56O4

SMILES: CCCCCCCCC=CCCCCCCCCCCCCCC(=O)OC(COC)COC

Mol. weight [g/mol]: 468.75

Physical Properties

Property code	Value	Unit	Source
gf	-172.84	kJ/mol	Joback Method
hf	-1039.19	kJ/mol	Joback Method
hfus	72.71	kJ/mol	Joback Method
hvap	93.69	kJ/mol	Joback Method
log10ws	-8.96		Crippen Method
logp	8.569		Crippen Method
mcvol	434.350	ml/mol	McGowan Method
pc	647.46	kPa	Joback Method
rinpol	3198.80		NIST Webbook
rinpol	3198.80		NIST Webbook
tb	987.77	K	Joback Method
tc	1226.24	K	Joback Method
tf	513.13	K	Joback Method
vc	1.694	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1522.37	J/mol×K	987.77	Joback Method
cpg	1622.04	J/mol×K	1186.49	Joback Method
cpg	1605.90	J/mol×K	1146.75	Joback Method
cpg	1587.94	J/mol×K	1107.00	Joback Method
cpg	1568.09	J/mol×K	1067.26	Joback Method
cpg	1546.25	J/mol×K	1027.51	Joback Method
cpg	1636.44	J/mol×K	1226.24	Joback Method
dvisc	0.0000085	Pa×s	987.77	Joback Method

dvisc	0.0000117	Pa×s	908.66	Joback Method
dvisc	0.0000172	Pa×s	829.56	Joback Method
dvisc	0.0000274	Pa×s	750.45	Joback Method
dvisc	0.0000487	Pa×s	671.34	Joback Method
dvisc	0.0001011	Pa×s	592.24	Joback Method
dvisc	0.0002627	Pa×s	513.13	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=U412823&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
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