Fumaric acid, di(tetradec-3-enyl) ester

Inchi: InChI=1S/C32H56O4/c1-3-5-7-9-11-13-15-17-19-21-23-25-29-35-31(33)27-28-32(34)36-
InchiKey: XIBFVAYWVIZSPB-RKDWFBATSA-N
Formula: C32H56O4
SMILES: CCCCCCCCCCC=CCCOC(=O)C=CC(=O)OCCC=CCCCCCCCCCC
Mol. weight [g/mol]: 504.78

Physical Properties

Property code	Value	Unit	Source
gf	-8.62	kJ/mol	Joback Method
hf	-841.75	kJ/mol	Joback Method
hfus	84.82	kJ/mol	Joback Method
hvap	105.01	kJ/mol	Joback Method
log10ws	-10.50		Crippen Method
logp	9.583		Crippen Method
mcvol	463.720	ml/mol	McGowan Method
pc	612.08	kPa	Joback Method
rinpol	3620.00		NIST Webbook
rinpol	3620.00		NIST Webbook
tb	1096.62	K	Joback Method
tc	1379.82	K	Joback Method
tf	579.48	K	Joback Method
vc	1.815	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1652.05	J/mol×K	1096.62	Joback Method
cpg	1764.22	J/mol×K	1332.62	Joback Method
cpg	1744.30	J/mol×K	1285.42	Joback Method
cpg	1723.36	J/mol×K	1238.22	Joback Method
cpg	1701.17	J/mol×K	1191.02	Joback Method
cpg	1677.48	J/mol×K	1143.82	Joback Method
cpg	1783.36	J/mol×K	1379.82	Joback Method
dvisc	0.0000057	Pa×s	1096.62	Joback Method

dvisc	0.0000077	Pa×s	1010.43	Joback Method
dvisc	0.0000112	Pa×s	924.24	Joback Method
dvisc	0.0000174	Pa×s	838.05	Joback Method
dvisc	0.0000301	Pa×s	751.86	Joback Method
dvisc	0.0000597	Pa×s	665.67	Joback Method
dvisc	0.0001456	Pa×s	579.48	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=U348845&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