4-(3,5-Dimethoxydecyl)-1,2-dimethoxybenzene

Inchi: InChI=1S/C20H34O4/c1-6-7-8-9-17(21-2)15-18(22-3)12-10-16-11-13-19(23-4)20(14-16)2
InchiKey: HAKUXQDCFCWGJP-UHFFFAOYSA-N
Formula: C20H34O4
SMILES: CCCCCC(CC(CCc1ccc(OC)c(OC)c1)OC)OC
Mol. weight [g/mol]: 338.48

Physical Properties

Property code	Value	Unit	Source
gf	-214.21	kJ/mol	Joback Method
hf	-781.98	kJ/mol	Joback Method
hfus	38.52	kJ/mol	Joback Method
hvap	72.58	kJ/mol	Joback Method
log10ws	-5.10		Crippen Method
logp	4.637		Crippen Method
mcvol	292.380	ml/mol	McGowan Method
pc	1198.13	kPa	Joback Method
rinpol	2343.70		NIST Webbook
rinpol	2343.70		NIST Webbook
tb	782.44	K	Joback Method
tc	972.92	K	Joback Method
tf	425.54	K	Joback Method
vc	1.107	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	895.21	J/mol×K	782.44	Joback Method
cpg	978.18	J/mol×K	941.17	Joback Method
cpg	963.89	J/mol×K	909.43	Joback Method
cpg	948.44	J/mol×K	877.68	Joback Method
cpg	931.84	J/mol×K	845.93	Joback Method
cpg	914.09	J/mol×K	814.19	Joback Method
cpg	991.33	J/mol×K	972.92	Joback Method
dvisc	0.0000284	Pa×s	782.44	Joback Method

dvisc	0.0000377	Pa×s	722.96	Joback Method
dvisc	0.0000526	Pa×s	663.47	Joback Method
dvisc	0.0000784	Pa×s	603.99	Joback Method
dvisc	0.0001274	Pa×s	544.51	Joback Method
dvisc	0.0002335	Pa×s	485.02	Joback Method
dvisc	0.0005067	Pa×s	425.54	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=U412842&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