4,4',4''-Trimethoxytrityl alcohol

Other names:	Benzenemethanol, 4-methoxy-«alpha»,«alpha»-bis(4-methoxyphenyl)- 4,4',4''-trimethoxytrityl alcohol
Inchi:	InChI=1S/C22H22O4/c1-24-19-10-4-16(5-11-19)22(23,17-6-12-20(25-2)13-7-17)18-8-14-
InchiKey:	JCLOLVVCZNYDIP-UHFFFAOYSA-N
Formula:	C22H22O4
SMILES:	COc1ccc(C(O)(c2ccc(OC)cc2)c2ccc(OC)cc2)cc1
Mol. weight [g/mol]:	350.41
CAS:	3010-81-9

Physical Properties

Property code	Value	Unit	Source
gf	-6.28	kJ/mol	Joback Method
hf	-379.87	kJ/mol	Joback Method
hfus	33.93	kJ/mol	Joback Method
hvap	95.99	kJ/mol	Joback Method
log10ws	-5.08		Crippen Method
logp	3.997		Crippen Method
mcvol	273.040	ml/mol	McGowan Method
pc	1854.71	kPa	Joback Method
tb	953.95	K	Joback Method
tc	1190.61	K	Joback Method
tf	584.45	K	Joback Method
vc	1.006	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	851.06	J/mol×K	953.95	Joback Method
cpg	863.34	J/mol×K	993.39	Joback Method
cpg	874.29	J/mol×K	1032.84	Joback Method
cpg	883.97	J/mol×K	1072.28	Joback Method
cpg	892.44	J/mol×K	1111.72	Joback Method
cpg	899.76	J/mol×K	1151.16	Joback Method
cpg	905.99	J/mol×K	1190.61	Joback Method

dvisc	0.0000831	Pa×s	584.45	Joback Method
dvisc	0.0000389	Pa×s	646.03	Joback Method
dvisc	0.0000208	Pa×s	707.62	Joback Method
dvisc	0.0000123	Pa×s	769.20	Joback Method
dvisc	0.0000078	Pa×s	830.78	Joback Method
dvisc	0.0000053	Pa×s	892.37	Joback Method
dvisc	0.0000038	Pa×s	953.95	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3010819&Units=SI
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

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume