Fumaric acid, di(3,4-dimethoxyphenyl) ester

Inchi: InChI=1S/C20H20O8/c1-23-15-7-5-13(11-17(15)25-3)27-19(21)9-10-20(22)28-14-6-8-16
InchiKey: ZRWICVAFXXATAO-MDZDMXLPSA-N
Formula: C20H20O8
SMILES: COc1ccc(OC(=O)C=CC(=O)Oc2ccc(OC)c(OC)c2)cc1OC
Mol. weight [g/mol]: 388.37

Physical Properties

Property code	Value	Unit	Source
gf	-503.80	kJ/mol	Joback Method
hf	-930.21	kJ/mol	Joback Method
hfus	44.61	kJ/mol	Joback Method
hvap	95.22	kJ/mol	Joback Method
log10ws	-4.08		Crippen Method
logp	2.788		Crippen Method
mcvol	279.200	ml/mol	McGowan Method
pc	1652.46	kPa	Joback Method
rinpol	3219.00		NIST Webbook
tb	976.70	K	Joback Method
tc	1207.33	K	Joback Method
tf	646.24	K	Joback Method
vc	1.040	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	854.21	J/mol×K	976.70	Joback Method
cpg	864.06	J/mol×K	1015.14	Joback Method
cpg	872.11	J/mol×K	1053.58	Joback Method
cpg	878.32	J/mol×K	1092.02	Joback Method
cpg	882.66	J/mol×K	1130.45	Joback Method
cpg	885.07	J/mol×K	1168.89	Joback Method
cpg	885.52	J/mol×K	1207.33	Joback Method
dvisc	0.0000899	Pa×s	646.24	Joback Method
dvisc	0.0000605	Pa×s	701.32	Joback Method

dvisc	0.0000432	Pa×s	756.39	Joback Method
dvisc	0.0000322	Pa×s	811.47	Joback Method
dvisc	0.0000250	Pa×s	866.55	Joback Method
dvisc	0.0000199	Pa×s	921.62	Joback Method
dvisc	0.0000163	Pa×s	976.70	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=U348177&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