(+)-di-O-4-Toluoyl-D-tartaric acid

Other names:	(+)-di-O,O'-p-Toluyl-D-tartaric acid
	di-p-Toluoyl-L-tartaric acid
	(-)-di-p-Toluyl-L-tartaric acid
	(2S,35)-(-)-di-o-4-Toluoyl-D-tartaric acid
	L-di-p-Toluyltartaric acid
	Butanedioic acid, 2,3-bis[(4-methylbenzoyl)oxy]-, [S-(R*,R*)]-
	[S(R*,R*)]-2,3-bis[(4-methylbenzoyl)oxy]succinic acid
Inchi:	InChI=1S/C20H18O8/c1-11-3-7-13(8-4-11)19(25)27-15(17(21)22)16(18(23)24)28-20(26)
InchiKey:	CMIBUZBMZCBCAT-UHFFFAOYSA-N
Formula:	C20H18O8
SMILES:	Cc1ccc(C(=O)OC(C(=O)O)C(OC(=O)c2ccc(C)cc2)C(=O)O)cc1
Mol. weight [g/mol]:	386.35
CAS:	32634-68-7

Physical Properties

Property code	Value	Unit	Source
gf	-681.12	kJ/mol	Joback Method
hf	-1035.79	kJ/mol	Joback Method
hfus	44.76	kJ/mol	Joback Method
hvap	130.38	kJ/mol	Joback Method
log10ws	-3.82		Crippen Method
logp	2.224		Crippen Method
mcvol	274.900	ml/mol	McGowan Method
pc	2293.71	kPa	Joback Method
tb	1164.12	K	Joback Method
tc	1427.36	K	Joback Method
tf	728.86	K	Joback Method
vc	1.026	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	867.78	J/mol×K	1164.12	Joback Method
cpg	871.48	J/mol×K	1207.99	Joback Method

cpg	873.65	J/mol×K	1251.87	Joback Method
cpg	874.34	J/mol×K	1295.74	Joback Method
cpg	873.60	J/mol×K	1339.61	Joback Method
cpg	871.49	J/mol×K	1383.49	Joback Method
cpg	868.05	J/mol×K	1427.36	Joback Method
dvisc	0.0000152	Pa×s	728.86	Joback Method
dvisc	0.0000065	Pa×s	801.40	Joback Method
dvisc	0.0000032	Pa×s	873.95	Joback Method
dvisc	0.0000017	Pa×s	946.49	Joback Method
dvisc	0.0000010	Pa×s	1019.03	Joback Method
dvisc	0.0000007	Pa×s	1091.58	Joback Method
dvisc	0.0000004	Pa×s	1164.12	Joback Method

Sources

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=C32634687&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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