

Dimethyl 4,4'-stilbenedicarboxylate

Inchi:	InChI=1S/C18H16O4/c1-21-17(19)15-9-5-13(6-10-15)3-4-14-7-11-16(12-8-14)18(20)22-2
InchiKey:	JOODVYOWCWQPMV-ONEGZZNKSA-N
Formula:	C18H16O4
SMILES:	<chem>COC(=O)c1ccc(C=Cc2ccc(C(=O)OC)cc2)cc1</chem>
Mol. weight [g/mol]:	296.32
CAS:	10374-80-8

Physical Properties

Property code	Value	Unit	Source
gf	-81.38	kJ/mol	Joback Method
hf	-337.11	kJ/mol	Joback Method
hfus	35.46	kJ/mol	Joback Method
hvap	79.81	kJ/mol	Joback Method
log10ws	-4.56		Crippen Method
logp	3.430		Crippen Method
mcvol	227.540	ml/mol	McGowan Method
pc	2123.64	kPa	Joback Method
tb	831.30	K	Joback Method
tc	1068.03	K	Joback Method
tf	509.74	K	Joback Method
vc	0.856	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	640.29	J/molxK	831.30	Joback Method
cpg	695.59	J/molxK	1028.57	Joback Method
cpg	686.75	J/molxK	989.12	Joback Method
cpg	676.84	J/molxK	949.66	Joback Method
cpg	665.82	J/molxK	910.21	Joback Method
cpg	653.66	J/molxK	870.75	Joback Method
cpg	703.43	J/molxK	1068.03	Joback Method
dvisc	0.0000647	Paxs	831.30	Joback Method
dvisc	0.0000808	Paxs	777.71	Joback Method

dvisc	0.0001043	Paxs	724.11	Joback Method
dvisc	0.0001403	Paxs	670.52	Joback Method
dvisc	0.0001985	Paxs	616.93	Joback Method
dvisc	0.0003003	Paxs	563.33	Joback Method
dvisc	0.0004954	Paxs	509.74	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C10374808&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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