

1,3-Benzenedicarboxylic acid, 4-methoxy-, dimethyl ester

Other names:	dimethyl 4-methoxyisophthalate
Inchi:	InChI=1S/C11H12O5/c1-14-9-5-4-7(10(12)15-2)6-8(9)11(13)16-3/h4-6H,1-3H3
InchiKey:	VYLTWLWJTAJDSS-UHFFFAOYSA-N
Formula:	C11H12O5
SMILES:	COC(=O)c1ccc(OC)c(C(=O)OC)c1
Mol. weight [g/mol]:	224.21
CAS:	22955-73-3

Physical Properties

Property code	Value	Unit	Source
gf	-437.95	kJ/mol	Joback Method
hf	-678.60	kJ/mol	Joback Method
hfus	24.27	kJ/mol	Joback Method
hvap	64.40	kJ/mol	Joback Method
log10ws	-2.08		Crippen Method
logp	1.268		Crippen Method
mcvol	162.840	ml/mol	McGowan Method
pc	2775.92	kPa	Joback Method
rinpol	1726.00		NIST Webbook
tb	662.72	K	Joback Method
tc	876.45	K	Joback Method
tf	431.74	K	Joback Method
vc	0.610	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	410.14	J/mol×K	662.72	Joback Method
cpg	422.48	J/mol×K	698.34	Joback Method
cpg	434.10	J/mol×K	733.96	Joback Method
cpg	444.98	J/mol×K	769.58	Joback Method
cpg	455.09	J/mol×K	805.21	Joback Method
cpg	464.41	J/mol×K	840.83	Joback Method
cpg	472.91	J/mol×K	876.45	Joback Method

dvisc	0.0007263	Pa×s	431.74	Joback Method
dvisc	0.0004844	Pa×s	470.24	Joback Method
dvisc	0.0003435	Pa×s	508.73	Joback Method
dvisc	0.0002557	Pa×s	547.23	Joback Method
dvisc	0.0001978	Pa×s	585.73	Joback Method
dvisc	0.0001580	Pa×s	624.22	Joback Method
dvisc	0.0001295	Pa×s	662.72	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=C22955733&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

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