

# 1,3-Benzenedicarboxylic acid, 5-amino-, dimethyl ester

<b>Other names:</b>	Isophthalic acid, 5-amino-, dimethyl ester Dimethyl 5-aminoisophthalate 3,5-Dicarbomethoxyaniline 5-Aminoisophthalic acid dimethyl ester 5-Amino-1,3-isophthalic acid dimethyl ester
<b>Inchi:</b>	InChI=1S/C10H11NO4/c1-14-9(12)6-3-7(10(13)15-2)5-8(11)4-6/h3-5H,11H2,1-2H3
<b>InchiKey:</b>	DEKPYXUDJRABNK-UHFFFAOYSA-N
<b>Formula:</b>	C10H11NO4
<b>SMILES:</b>	<chem>COC(=O)c1cc(N)cc(C(=O)OC)c1</chem>
<b>Mol. weight [g/mol]:</b>	209.20
<b>CAS:</b>	99-27-4

## Physical Properties

Property code	Value	Unit	Source
gf	-274.92	kJ/mol	Joback Method
hf	-491.95	kJ/mol	Joback Method
hfus	25.69	kJ/mol	Joback Method
hvap	70.41	kJ/mol	Joback Method
log10ws	-1.59		Crippen Method
logp	0.842		Crippen Method
mcvol	152.860	ml/mol	McGowan Method
pc	3348.98	kPa	Joback Method
tb	689.95	K	Joback Method
tc	916.45	K	Joback Method
tf	481.50	K	Joback Method
vc	0.565	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	392.39	J/mol×K	689.95	Joback Method
cpg	403.72	J/mol×K	727.70	Joback Method
cpg	414.26	J/mol×K	765.45	Joback Method
cpg	424.02	J/mol×K	803.20	Joback Method

cpg	432.97	J/mol×K	840.95	Joback Method
cpg	441.11	J/mol×K	878.70	Joback Method
cpg	448.43	J/mol×K	916.45	Joback Method

## Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C99274&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C99274&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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