

# Carbamic acid, phenyl-, 1-methylethyl ester

**Other names:** Carbanilic acid, isopropyl ester  
Agermin  
Birgin  
Chem-Hoe  
Collavin  
Iso.PPC.  
Isopropyl carbanilate  
Isopropyl phenyl urethane  
Isopropyl phenylcarbamate  
Isopropyl phenylcarbmate  
IFK  
INPC  
IPC  
IPPC  
Profam  
Propham  
Tixit  
Tuberit  
Tuberite  
Y 2  
Isopropyl N-phenylcarbamate  
N-Phenylcarbamate d'isopropyle  
O-Isopropyl N-phenylcarbamate  
Ban-Hoe  
Beet-Kleen  
Isopropil-N-fenil-carbammato  
Isopropyl carbanilic acid ester  
Isopropyl-N-fenyl-carbamaat  
Isopropyl-N-phenyl-carbamat  
Isopropyl-N-phenylurethan  
IFC  
N-Phenyl isopropyl carbamate  
N-Phenylcarbamic acid, isopropyl ester  
Ortho grass killer  
Phenylcarbamic acid,1-methylethyl ester  
Prophame  
Triherbide  
Triherbide-IPC  
USAF D-9  
Isopropylester kyseliny karbanilove

Premalox  
N-Phenyl-O-isopropylurethane  
Carbamate pesticide IPC  
1-Methylethyl phenylcarbamate  
ISO.PPC  
IsoPPC

Carbamic acid, phenyl, isopropyl ester  
Carbamic acid, N-phenyl-, 1-methylethyl ester

**Inchi:** InChI=1S/C10H13NO2/c1-8(2)13-10(12)11-9-6-4-3-5-7-9/h3-8H,1-2H3,(H,11,12)  
**InchiKey:** VXPLXMJHHKHSOA-UHFFFAOYSA-N  
**Formula:** C10H13NO2  
**SMILES:** CC(C)OC(=O)Nc1ccccc1  
**Mol. weight [g/mol]:** 179.22  
**CAS:** 122-42-9

## Physical Properties

Property code	Value	Unit	Source
chs	-5351.00 ± 2.00	kJ/mol	NIST Webbook
gf	-1.24	kJ/mol	Joback Method
hf	-209.81	kJ/mol	Joback Method
hfus	20.06	kJ/mol	Joback Method
hvap	55.33	kJ/mol	Joback Method
log10ws	-2.69		Crippen Method
logp	2.643		Crippen Method
mcvol	145.420	ml/mol	McGowan Method
pc	3156.17	kPa	Joback Method
rinpol	1423.00		NIST Webbook
rinpol	1438.00		NIST Webbook
rinpol	1434.00		NIST Webbook
rinpol	1453.00		NIST Webbook
rinpol	1449.00		NIST Webbook
rinpol	1438.00		NIST Webbook
rinpol	1459.00		NIST Webbook
rinpol	1477.00		NIST Webbook
rinpol	1431.00		NIST Webbook
rinpol	1432.00		NIST Webbook
rinpol	1434.00		NIST Webbook
rinpol	1437.00		NIST Webbook
rinpol	1459.00		NIST Webbook
rinpol	1462.00		NIST Webbook

rinpol	1456.00		NIST Webbook
ripol	2000.00		NIST Webbook
tb	580.90	K	Joback Method
tc	798.13	K	Joback Method
tf	360.45 ± 0.20	K	NIST Webbook
tf	357.70 ± 0.20	K	NIST Webbook
vc	0.540	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	348.62	J/mol×K	580.90	Joback Method
cpg	362.53	J/mol×K	617.11	Joback Method
cpg	375.58	J/mol×K	653.31	Joback Method
cpg	387.80	J/mol×K	689.52	Joback Method
cpg	399.21	J/mol×K	725.72	Joback Method
cpg	409.83	J/mol×K	761.93	Joback Method
cpg	419.69	J/mol×K	798.13	Joback Method
hfust	19.37	kJ/mol	359.50	NIST Webbook
hfust	19.37	kJ/mol	359.50	NIST Webbook

## 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=C122429&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C122429&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.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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>chs:</b>	Standard solid enthalpy of combustion
<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>hfust:</b>	Enthalpy of fusion at a given temperature
<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>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

Latest version available from:

<https://www.cheméo.com/cid/42-166-1/Carbamic-acid-phenyl-1-methylethyl-ester.pdf>

Generated by Cheméo on 2024-07-25 12:32:02.708095227 +0000 UTC m=+600591.955200587.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.