

# Phthalic acid, 2,5-dichlorobenzyl nonyl ester

**Inchi:** InChI=1S/C24H28Cl2O4/c1-2-3-4-5-6-7-10-15-29-23(27)20-11-8-9-12-21(20)24(28)30-17  
**InchiKey:** ZKQUPLZICBKUQD-UHFFFAOYSA-N  
**Formula:** C24H28Cl2O4  
**SMILES:** CCCCCCCCCOC(=O)c1ccccc1C(=O)OCc1cc(Cl)ccc1Cl  
**Mol. weight [g/mol]:** 451.38

## Physical Properties

Property code	Value	Unit	Source
gf	-144.57	kJ/mol	Joback Method
hf	-621.12	kJ/mol	Joback Method
hfus	58.80	kJ/mol	Joback Method
hvap	102.64	kJ/mol	Joback Method
log10ws	-8.79		Crippen Method
logp	7.258		Crippen Method
mvol	340.860	ml/mol	McGowan Method
pc	1199.79	kPa	Joback Method
rinpol	3118.00		NIST Webbook
rinpol	3118.00		NIST Webbook
tb	1044.26	K	Joback Method
tc	1280.83	K	Joback Method
tf	654.80	K	Joback Method
vc	1.310	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1057.56	J/molxK	1044.26	Joback Method
cpg	1069.02	J/molxK	1083.69	Joback Method
cpg	1079.02	J/molxK	1123.12	Joback Method
cpg	1087.63	J/molxK	1162.54	Joback Method
cpg	1094.89	J/molxK	1201.97	Joback Method
cpg	1100.85	J/molxK	1241.40	Joback Method
cpg	1105.58	J/molxK	1280.83	Joback Method
dvisc	0.0001817	Paxs	654.80	Joback Method

dvisc	0.0001113	Paxs	719.71	Joback Method
dvisc	0.0000739	Paxs	784.62	Joback Method
dvisc	0.0000522	Paxs	849.53	Joback Method
dvisc	0.0000388	Paxs	914.44	Joback Method
dvisc	0.0000299	Paxs	979.35	Joback Method
dvisc	0.0000239	Paxs	1044.26	Joback Method

## Sources

<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>
<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=U382918&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U382918&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<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>rinpol:</b>	Non-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.chemeo.com/cid/115-586-4/Phthalic-acid-2-5-dichlorobenzyl-nonyl-ester.pdf>

Generated by Cheméo on 2024-04-30 18:50:48.152757257 +0000 UTC m=+16792297.073334567.

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