

# Phthalic acid, di(trans-dec-3-enyl) ester

<b>Inchi:</b>	InChI=1S/C28H42O4/c1-3-5-7-9-11-13-15-19-23-31-27(29)25-21-17-18-22-26(25)28(30)
<b>InchiKey:</b>	GYZMVDHCCQEWCN-WXUKJITCSA-N
<b>Formula:</b>	C28H42O4
<b>SMILES:</b>	CCCCCCC=CCOC(=O)c1ccccc1C(=O)OCC=CCCCCCC
<b>Mol. weight [g/mol]:</b>	442.63

## Physical Properties

Property code	Value	Unit	Source
gf	-19.74	kJ/mol	Joback Method
hf	-651.35	kJ/mol	Joback Method
hfus	67.91	kJ/mol	Joback Method
hvap	99.09	kJ/mol	Joback Method
log10ws	-9.20		Crippen Method
logp	7.834		Crippen Method
mvol	387.900	ml/mol	McGowan Method
pc	868.11	kPa	Joback Method
rinpol	3112.00		NIST Webbook
rinpol	3112.00		NIST Webbook
tb	1032.60	K	Joback Method
tc	1265.87	K	Joback Method
tf	578.42	K	Joback Method
vc	1.504	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1312.24	J/molxK	1032.60	Joback Method
cpg	1330.08	J/molxK	1071.48	Joback Method
cpg	1346.59	J/molxK	1110.36	Joback Method
cpg	1361.87	J/molxK	1149.23	Joback Method
cpg	1376.02	J/molxK	1188.11	Joback Method
cpg	1389.14	J/molxK	1226.99	Joback Method
cpg	1401.34	J/molxK	1265.87	Joback Method
dvisc	0.0002030	Paxs	578.42	Joback Method

dvisc	0.0000985	Paxs	654.12	Joback Method
dvisc	0.0000555	Paxs	729.81	Joback Method
dvisc	0.0000348	Paxs	805.51	Joback Method
dvisc	0.0000237	Paxs	881.21	Joback Method
dvisc	0.0000171	Paxs	956.90	Joback Method
dvisc	0.0000130	Paxs	1032.60	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U360510&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U360510&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>
<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>

## 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

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