

# Phthalic acid, decyl pent-4-enyl ester

<b>Inchi:</b>	InChI=1S/C23H34O4/c1-3-5-7-8-9-10-11-15-19-27-23(25)21-17-13-12-16-20(21)22(24)2
<b>InchiKey:</b>	JDTMQYZUXJSEHA-UHFFFAOYSA-N
<b>Formula:</b>	C23H34O4
<b>SMILES:</b>	C=CCCCOC(=O)c1cccc1C(=O)OCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	374.51

## Physical Properties

Property code	Value	Unit	Source
gf	-134.44	kJ/mol	Joback Method
hf	-657.16	kJ/mol	Joback Method
hfus	53.27	kJ/mol	Joback Method
hvap	87.37	kJ/mol	Joback Method
log10ws	-7.25		Crippen Method
logp	6.107		Crippen Method
mvol	321.750	ml/mol	McGowan Method
pc	1129.10	kPa	Joback Method
rinpol	2647.00		NIST Webbook
rinpol	2647.00		NIST Webbook
tb	906.56	K	Joback Method
tc	1112.82	K	Joback Method
tf	530.47	K	Joback Method
vc	1.244	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1029.39	J/molxK	906.56	Joback Method
cpg	1045.71	J/molxK	940.94	Joback Method
cpg	1060.79	J/molxK	975.31	Joback Method
cpg	1074.68	J/molxK	1009.69	Joback Method
cpg	1087.40	J/molxK	1044.06	Joback Method
cpg	1098.99	J/molxK	1078.44	Joback Method
cpg	1109.50	J/molxK	1112.82	Joback Method
dvisc	0.0004436	Paxs	530.47	Joback Method

dvisc	0.0002378	Paxs	593.15	Joback Method
dvisc	0.0001436	Paxs	655.83	Joback Method
dvisc	0.0000947	Paxs	718.52	Joback Method
dvisc	0.0000668	Paxs	781.20	Joback Method
dvisc	0.0000496	Paxs	843.88	Joback Method
dvisc	0.0000384	Paxs	906.56	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U360469&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U360469&amp;Units=SI</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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