

# Pimelic acid, heptyl 4-nitrophenyl ester

<b>Inchi:</b>	InChI=1S/C20H29NO6/c1-2-3-4-5-9-16-26-19(22)10-7-6-8-11-20(23)27-18-14-12-17(13-
<b>InchiKey:</b>	LKHAJTHWDZJSQH-UHFFFAOYSA-N
<b>Formula:</b>	C20H29NO6
<b>SMILES:</b>	CCCCCCCOC(=O)CCCCC(=O)Oc1ccc([N+](=O)[O-])cc1
<b>Mol. weight [g/mol]:</b>	379.45

## Physical Properties

Property code	Value	Unit	Source
gf	-211.99	kJ/mol	Joback Method
hf	-731.43	kJ/mol	Joback Method
hfus	58.14	kJ/mol	Joback Method
hvap	97.95	kJ/mol	Joback Method
log10ws	-6.32		Crippen Method
logp	4.964		Crippen Method
mvol	301.200	ml/mol	McGowan Method
pc	1353.63	kPa	Joback Method
rinpol	2998.00		NIST Webbook
rinpol	2998.00		NIST Webbook
tb	993.08	K	Joback Method
tc	1218.94	K	Joback Method
tf	642.03	K	Joback Method
vc	1.177	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	988.43	J/molxK	993.08	Joback Method
cpg	1001.03	J/molxK	1030.72	Joback Method
cpg	1012.27	J/molxK	1068.37	Joback Method
cpg	1022.20	J/molxK	1106.01	Joback Method
cpg	1030.85	J/molxK	1143.65	Joback Method
cpg	1038.27	J/molxK	1181.30	Joback Method
cpg	1044.48	J/molxK	1218.94	Joback Method

# Sources

<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=U416621&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U416621&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>

# 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>rinpola:</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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