

# Pimelic acid, di(nonyl) ester

<b>Inchi:</b>	InChI=1S/C25H48O4/c1-3-5-7-9-11-13-18-22-28-24(26)20-16-15-17-21-25(27)29-23-19-
<b>InchiKey:</b>	KKSRHANGWAZRCU-UHFFFAOYSA-N
<b>Formula:</b>	C25H48O4
<b>SMILES:</b>	CCCCCCCCCOC(=O)CCCCC(=O)OCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	412.65

## Physical Properties

Property code	Value	Unit	Source
gf	-308.22	kJ/mol	Joback Method
hf	-1048.93	kJ/mol	Joback Method
hfus	66.08	kJ/mol	Joback Method
hvap	89.56	kJ/mol	Joback Method
log10ws	-8.01		Crippen Method
logp	7.524		Crippen Method
mcvol	377.990	ml/mol	McGowan Method
pc	804.33	kPa	Joback Method
rinpol	2042.00		NIST Webbook
tb	923.98	K	Joback Method
tc	1135.00	K	Joback Method
tf	515.83	K	Joback Method
vc	1.484	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1281.17	J/molxK	923.98	Joback Method
cpg	1370.09	J/molxK	1099.83	Joback Method
cpg	1355.21	J/molxK	1064.66	Joback Method
cpg	1338.92	J/molxK	1029.49	Joback Method
cpg	1321.17	J/molxK	994.32	Joback Method
cpg	1301.94	J/molxK	959.15	Joback Method
cpg	1383.60	J/molxK	1135.00	Joback Method
dvisc	0.0000252	Paxs	923.98	Joback Method
dvisc	0.0000338	Paxs	855.95	Joback Method

dvisc	0.0000476	Paxs	787.93	Joback Method
dvisc	0.0000716	Paxs	719.90	Joback Method
dvisc	0.0001173	Paxs	651.88	Joback Method
dvisc	0.0002153	Paxs	583.86	Joback Method
dvisc	0.0004642	Paxs	515.83	Joback Method

## 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=U406466&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U406466&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>

## 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/86-706-3/Pimelic-acid-di-nonyl-ester.pdf>

Generated by Cheméo on 2024-05-07 00:33:13.148712422 +0000 UTC m=+17331242.069289733.

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