

# Nonanoic acid, propyl ester

<b>Other names:</b>	Propyl nonanoate n-Propyl nonanoate propyl nonan-1-oate
<b>Inchi:</b>	InChI=1S/C12H24O2/c1-3-5-6-7-8-9-10-12(13)14-11-4-2/h3-11H2,1-2H3
<b>InchiKey:</b>	HCMSDHYNNJTLRW-UHFFFAOYSA-N
<b>Formula:</b>	C12H24O2
<b>SMILES:</b>	CCCCCCCCC(=O)OCCC
<b>Mol. weight [g/mol]:</b>	200.32
<b>CAS:</b>	6513-03-7

## Physical Properties

Property code	Value	Unit	Source
gf	-183.76	kJ/mol	Joback Method
hf	-535.81	kJ/mol	Joback Method
hfus	29.62	kJ/mol	Joback Method
hvap	51.46	kJ/mol	Joback Method
log10ws	-3.71		Crippen Method
logp	3.690		Crippen Method
mcvol	187.380	ml/mol	McGowan Method
pc	1851.52	kPa	Joback Method
ripol	1598.00		NIST Webbook
tb	550.25	K	Joback Method
tc	720.05	K	Joback Method
tf	297.16	K	Joback Method
vc	0.732	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	464.17	J/molxK	550.25	Joback Method
cpg	479.84	J/molxK	578.55	Joback Method
cpg	494.90	J/molxK	606.85	Joback Method
cpg	509.36	J/molxK	635.15	Joback Method
cpg	523.23	J/molxK	663.45	Joback Method

cpg	536.51	J/mol×K	691.75	Joback Method
cpg	549.22	J/mol×K	720.05	Joback Method
dvisc	0.0030867	Paxs	297.16	Joback Method
dvisc	0.0014485	Paxs	339.34	Joback Method
dvisc	0.0008035	Paxs	381.52	Joback Method
dvisc	0.0005012	Paxs	423.70	Joback Method
dvisc	0.0003406	Paxs	465.89	Joback Method
dvisc	0.0002467	Paxs	508.07	Joback Method
dvisc	0.0001878	Paxs	550.25	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C6513037&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C6513037&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>ri<sub>pol</sub>:</b>	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/75-306-9/Nonanoic-acid-propyl-ester.pdf>

Generated by Cheméo on 2024-04-19 21:45:12.713290476 +0000 UTC m=+15852361.633867788.

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