

# Z5,E7-dodecadienal

<b>Inchi:</b>	InChI=1S/C12H20O/c1-2-3-4-5-6-7-8-9-10-11-12-13/h5-8,12H,2-4,9-11H2,1H3/b6-5+,8-7
<b>InchiKey:</b>	LDQDYNHCLZNOFB-MDAAKZFYSA-N
<b>Formula:</b>	C12H20O
<b>SMILES:</b>	CCCCC=CC=CCCC=O
<b>Mol. weight [g/mol]:</b>	180.29

## Physical Properties

Property code	Value	Unit	Source
gf	111.08	kJ/mol	Joback Method
hf	-142.15	kJ/mol	Joback Method
hfus	29.53	kJ/mol	Joback Method
hvap	48.94	kJ/mol	Joback Method
log10ws	-3.83		Crippen Method
logp	3.658		Crippen Method
mcvol	172.910	ml/mol	McGowan Method
pc	2081.22	kPa	Joback Method
ripol	1436.00		NIST Webbook
ripol	1436.00		NIST Webbook
ripol	1884.00		NIST Webbook
ripol	1884.00		NIST Webbook
ripol	1884.00		NIST Webbook
tb	530.94	K	Joback Method
tc	711.41	K	Joback Method
tf	256.84	K	Joback Method
vc	0.684	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	401.00	J/molxK	530.94	Joback Method
cpg	468.62	J/molxK	681.34	Joback Method
cpg	456.44	J/molxK	651.26	Joback Method
cpg	443.62	J/molxK	621.18	Joback Method
cpg	430.14	J/molxK	591.10	Joback Method

cpg	415.94	J/molxK	561.02	Joback Method
cpg	480.20	J/molxK	711.41	Joback Method
dvisc	0.0001813	Paxs	530.94	Joback Method
dvisc	0.0002402	Paxs	485.26	Joback Method
dvisc	0.0003373	Paxs	439.57	Joback Method
dvisc	0.0005125	Paxs	393.89	Joback Method
dvisc	0.0008690	Paxs	348.21	Joback Method
dvisc	0.0017283	Paxs	302.52	Joback Method
dvisc	0.0043899	Paxs	256.84	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=R517207&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R517207&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>mccvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>ripol:</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

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