

# cis-Cyclohex-4-en-1,2-dicarboxylic acid, decyl pentyl ester

<b>Inchi:</b>	InChI=1S/C23H40O4/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>	KGVPXIABOXFCAR-UHFFFAOYSA-N
<b>Formula:</b>	C23H40O4
<b>SMILES:</b>	CCCCCCCCCOC(=O)C1CC=CCC1C(=O)OCCCCC
<b>Mol. weight [g/mol]:</b>	380.56

## Physical Properties

Property code	Value	Unit	Source
gf	-278.36	kJ/mol	Joback Method
hf	-915.89	kJ/mol	Joback Method
hfus	55.03	kJ/mol	Joback Method
hvap	85.52	kJ/mol	Joback Method
log10ws	-6.44		Crippen Method
logp	5.986		Crippen Method
mvol	334.650	ml/mol	McGowan Method
pc	1023.34	kPa	Joback Method
rinpol	2591.00		NIST Webbook
rinpol	2591.00		NIST Webbook
tb	892.26	K	Joback Method
tc	1094.33	K	Joback Method
tf	497.19	K	Joback Method
vc	1.290	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1126.05	J/molxK	892.26	Joback Method
cpg	1206.16	J/molxK	1060.65	Joback Method
cpg	1192.96	J/molxK	1026.97	Joback Method
cpg	1178.38	J/molxK	993.30	Joback Method
cpg	1162.38	J/molxK	959.62	Joback Method
cpg	1144.95	J/molxK	925.94	Joback Method
cpg	1218.01	J/molxK	1094.33	Joback Method
dvisc	0.0000502	Paxs	892.26	Joback Method

dvisc	0.0000655	Paxs	826.42	Joback Method
dvisc	0.0000897	Paxs	760.57	Joback Method
dvisc	0.0001302	Paxs	694.73	Joback Method
dvisc	0.0002044	Paxs	628.88	Joback Method
dvisc	0.0003567	Paxs	563.03	Joback Method
dvisc	0.0007213	Paxs	497.19	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=U382674&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U382674&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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>cp<sub>g</sub>:</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>log<sub>10</sub>ws:</b>	Log <sub>10</sub> of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>m<sub>cvol</sub>:</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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