

# cis-Cyclohex-4-en-1,2-dicarboxylic acid, hexyl octadecyl ester

Inchi:	InChI=1S/C32H58O4/c1-3-5-7-9-10-11-12-13-14-15-16-17-18-19-20-24-28-36-32(34)30-
InchiKey:	CYMJZPPRHAVOBJ-UHFFFAOYSA-N
Formula:	C32H58O4
SMILES:	CCCCCCCCCCCCCCCCCOC(=O)C1CC=CCC1C(=O)OCCCCC
Mol. weight [g/mol]:	506.80

## Physical Properties

Property code	Value	Unit	Source
gf	-202.58	kJ/mol	Joback Method
hf	-1101.65	kJ/mol	Joback Method
hfus	78.34	kJ/mol	Joback Method
hvap	105.55	kJ/mol	Joback Method
log10ws	-10.21		Crippen Method
logp	9.497		Crippen Method
mvol	461.460	ml/mol	McGowan Method
pc	628.14	kPa	Joback Method
rinpol	3491.00		NIST Webbook
tb	1098.18	K	Joback Method
tc	1373.74	K	Joback Method
tf	598.62	K	Joback Method
vc	1.794	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1701.43	J/molxK	1098.18	Joback Method
cpg	1779.72	J/molxK	1327.81	Joback Method
cpg	1769.35	J/molxK	1281.89	Joback Method
cpg	1756.47	J/molxK	1235.96	Joback Method
cpg	1740.94	J/molxK	1190.03	Joback Method
cpg	1722.64	J/molxK	1144.11	Joback Method
cpg	1787.71	J/molxK	1373.74	Joback Method
dvisc	0.0000128	Paxs	1098.18	Joback Method
dvisc	0.0000171	Paxs	1014.92	Joback Method

dvisc	0.0000240	Paxs	931.66	Joback Method
dvisc	0.0000360	Paxs	848.40	Joback Method
dvisc	0.0000589	Paxs	765.14	Joback Method
dvisc	0.0001087	Paxs	681.88	Joback Method
dvisc	0.0002379	Paxs	598.62	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U382750&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U382750&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>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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