

# 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl decyl ester

**Inchi:** InChI=1S/C25H44O4/c1-2-3-4-5-6-7-8-14-19-28-24(26)22-17-12-13-18-23(22)25(27)29-2  
**InchiKey:** KQMSTGAAANOJDG-UHFFFAOYSA-N  
**Formula:** C25H44O4  
**SMILES:** CCCCCCCCCOC(=O)C1CCCCC1C(=O)OCC1CCCCC1  
**Mol. weight [g/mol]:** 408.61

## Physical Properties

Property code	Value	Unit	Source
gf	-267.03	kJ/mol	Joback Method
hf	-960.63	kJ/mol	Joback Method
hfus	50.82	kJ/mol	Joback Method
hvap	90.11	kJ/mol	Joback Method
log10ws	-7.08		Crippen Method
logp	6.600		Crippen Method
mvol	356.270	ml/mol	McGowan Method
pc	1008.45	kPa	Joback Method
rinpol	2906.00		NIST Webbook
rinpol	2906.00		NIST Webbook
tb	958.41	K	Joback Method
tc	1176.05	K	Joback Method
tf	526.35	K	Joback Method
vc	1.349	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1279.03	J/molxK	958.41	Joback Method
cpg	1298.29	J/molxK	994.68	Joback Method
cpg	1315.61	J/molxK	1030.96	Joback Method
cpg	1331.03	J/molxK	1067.23	Joback Method
cpg	1344.60	J/molxK	1103.50	Joback Method
cpg	1356.36	J/molxK	1139.78	Joback Method
cpg	1366.35	J/molxK	1176.05	Joback Method
dvisc	0.0006516	Paxs	526.35	Joback Method

dvisc	0.0002993	Paxs	598.36	Joback Method
dvisc	0.0001625	Paxs	670.37	Joback Method
dvisc	0.0000994	Paxs	742.38	Joback Method
dvisc	0.0000663	Paxs	814.39	Joback Method
dvisc	0.0000472	Paxs	886.40	Joback Method
dvisc	0.0000354	Paxs	958.41	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=U339744&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U339744&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>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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