

# 1,2-Cyclohexanedicarboxylic acid, dodecyl 2-methylbutyl ester

Inchi:	InChI=1S/C25H46O4/c1-4-6-7-8-9-10-11-12-13-16-19-28-24(26)22-17-14-15-18-23(22)2
InchiKey:	MEPLAXCWJWWWLR-UHFFFAOYSA-N
Formula:	C25H46O4
SMILES:	CCCCCCCCCCCCOC(=O)C1CCCCC1C(=O)OCC(C)CC
Mol. weight [g/mol]:	410.63

## Physical Properties

Property code	Value	Unit	Source
gf	-293.92	kJ/mol	Joback Method
hf	-1020.23	kJ/mol	Joback Method
hfus	55.46	kJ/mol	Joback Method
hvap	89.29	kJ/mol	Joback Method
log10ws	-7.18		Crippen Method
logp	6.846		Crippen Method
mvol	367.130	ml/mol	McGowan Method
pc	893.20	kPa	Joback Method
rinpol	2785.00		NIST Webbook
rinpol	2785.00		NIST Webbook
tb	938.42	K	Joback Method
tc	1148.91	K	Joback Method
tf	503.97	K	Joback Method
vc	1.409	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1282.66	J/molxK	938.42	Joback Method
cpg	1365.24	J/molxK	1113.83	Joback Method
cpg	1352.01	J/molxK	1078.75	Joback Method
cpg	1337.18	J/molxK	1043.67	Joback Method
cpg	1320.70	J/molxK	1008.58	Joback Method
cpg	1302.54	J/molxK	973.50	Joback Method
cpg	1376.89	J/molxK	1148.91	Joback Method
dvisc	0.0000313	Paxs	938.42	Joback Method

dvisc	0.0000421	Paxs	866.01	Joback Method
dvisc	0.0000597	Paxs	793.60	Joback Method
dvisc	0.0000909	Paxs	721.19	Joback Method
dvisc	0.0001518	Paxs	648.79	Joback Method
dvisc	0.0002884	Paxs	576.38	Joback Method
dvisc	0.0006590	Paxs	503.97	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=U339551&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U339551&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>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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