

# Dimethylmalonic acid, cis-4-methylcyclohexyl tetradecyl ester

Inchi:	InChI=1S/C26H48O4/c1-5-6-7-8-9-10-11-12-13-14-15-16-21-29-24(27)26(3,4)25(28)30-2
InchiKey:	DDJGAQIGSPJABS-UHFFFAOYSA-N
Formula:	C26H48O4
SMILES:	CCCCCCCCCCCCCOC(=O)C(C)(C)C(=O)OC1CCC(C)CC1
Mol. weight [g/mol]:	424.66

## Physical Properties

Property code	Value	Unit	Source
gf	-280.22	kJ/mol	Joback Method
hf	-1044.34	kJ/mol	Joback Method
hfus	54.16	kJ/mol	Joback Method
hvap	90.61	kJ/mol	Joback Method
log10ws	-7.95		Crippen Method
logp	7.379		Crippen Method
mcvol	381.220	ml/mol	McGowan Method
pc	849.49	kPa	Joback Method
rinpol	2841.00		NIST Webbook
rinpol	2841.00		NIST Webbook
tb	958.51	K	Joback Method
tc	1173.49	K	Joback Method
tf	532.66	K	Joback Method
vc	1.460	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1345.91	J/molxK	958.51	Joback Method
cpg	1365.93	J/molxK	994.34	Joback Method
cpg	1384.24	J/molxK	1030.17	Joback Method
cpg	1400.93	J/molxK	1066.00	Joback Method
cpg	1416.03	J/molxK	1101.83	Joback Method
cpg	1429.63	J/molxK	1137.66	Joback Method
cpg	1441.77	J/molxK	1173.49	Joback Method
dvisc	0.0004587	Paxs	532.66	Joback Method

dvisc	0.0002066	Paxs	603.63	Joback Method
dvisc	0.0001101	Paxs	674.61	Joback Method
dvisc	0.0000661	Paxs	745.59	Joback Method
dvisc	0.0000434	Paxs	816.56	Joback Method
dvisc	0.0000305	Paxs	887.54	Joback Method
dvisc	0.0000225	Paxs	958.51	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=U363887&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U363887&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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