

# Cyclohexane, (1-hexadecylheptadecyl)-

<b>Other names:</b>	17-Cyclohexyltritriacontane 17-Cyclohexyltritricontane
<b>Inchi:</b>	InChI=1S/C39H78/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-30-34-38(39-36-32-29-33-37-
<b>InchiKey:</b>	SUJPBAUMCPFUIW-UHFFFAOYSA-N
<b>Formula:</b>	C39H78
<b>SMILES:</b>	CCCCCCCCCCCCCCCCCC(CCCCCCCCCCCCCCCCCC)C1CCCCC1
<b>Mol. weight [g/mol]:</b>	547.04
<b>CAS:</b>	55517-75-4

## Physical Properties

Property code	Value	Unit	Source
gf	299.51	kJ/mol	Joback Method
hf	-799.25	kJ/mol	Joback Method
hfus	85.08	kJ/mol	Joback Method
hvap	102.45	kJ/mol	Joback Method
log10ws	-15.56		Crippen Method
logp	14.926		Crippen Method
mvol	549.510	ml/mol	McGowan Method
pc	443.40	kPa	Joback Method
tb	1110.83	K	Joback Method
tc	1423.76	K	Joback Method
tf	297.95 ± 0.50	K	NIST Webbook
vc	2.147	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2273.15	J/mol×K	1423.76	Joback Method
cpg	2249.93	J/mol×K	1371.60	Joback Method
cpg	2225.18	J/mol×K	1319.45	Joback Method
cpg	2198.50	J/mol×K	1267.29	Joback Method
cpg	2169.52	J/mol×K	1215.14	Joback Method
cpg	2137.82	J/mol×K	1162.98	Joback Method
cpg	2103.03	J/mol×K	1110.83	Joback Method

dvisc	0.0003662	Paxs	521.67	Joback Method
dvisc	0.0000054	Paxs	1110.83	Joback Method
dvisc	0.0000078	Paxs	1012.64	Joback Method
dvisc	0.0000121	Paxs	914.44	Joback Method
dvisc	0.0000208	Paxs	816.25	Joback Method
dvisc	0.0000417	Paxs	718.06	Joback Method
dvisc	0.0001040	Paxs	619.86	Joback Method
hvapt	131.90	kJ/mol	586.00	NIST Webbook

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C55517754&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C55517754&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>hvapt:</b>	Enthalpy of vaporization at a given temperature
<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>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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