

Cyclohexane, 1,4-didecyl-

Other names:	1,4-Di-n-decylcyclohexane
Inchi:	InChI=1S/C26H52/c1-3-5-7-9-11-13-15-17-19-25-21-23-26(24-22-25)20-18-16-14-12-10-
InchiKey:	ZDOBWFOCGGBPNS-UHFFFAOYSA-N
Formula:	C26H52
SMILES:	CCCCCCCCCCC1CCC(CCCCCCCCCC)CC1
Mol. weight [g/mol]:	364.69
CAS:	55334-20-8

Physical Properties

Property code	Value	Unit	Source
gf	184.78	kJ/mol	Joback Method
hf	-545.99	kJ/mol	Joback Method
hfus	56.00	kJ/mol	Joback Method
hvap	73.59	kJ/mol	Joback Method
log10ws	-10.12		Crippen Method
logp	9.854		Crippen Method
mcvol	366.340	ml/mol	McGowan Method
pc	797.08	kPa	Joback Method
tb	809.16	K	Joback Method
tc	993.64	K	Joback Method
tf	322.70 ± 1.00	K	NIST Webbook
vc	1.423	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1219.56	J/mol×K	809.16	Joback Method
cpg	1244.29	J/mol×K	839.91	Joback Method
cpg	1267.68	J/mol×K	870.65	Joback Method
cpg	1289.77	J/mol×K	901.40	Joback Method
cpg	1310.61	J/mol×K	932.15	Joback Method
cpg	1330.25	J/mol×K	962.90	Joback Method
cpg	1348.74	J/mol×K	993.64	Joback Method
dvisc	0.0020609	Pa×s	385.92	Joback Method

dvisc	0.0007174	Pa×s	456.46	Joback Method
dvisc	0.0003313	Pa×s	527.00	Joback Method
dvisc	0.0001836	Pa×s	597.54	Joback Method
dvisc	0.0001152	Pa×s	668.08	Joback Method
dvisc	0.0000791	Pa×s	738.62	Joback Method
dvisc	0.0000579	Pa×s	809.16	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55334208&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/72-195-6/Cyclohexane-1-4-didecyl.pdf>

Generated by Cheméo on 2025-12-05 06:21:12.72432488 +0000 UTC m=+4663870.254365534.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.