

Dodecane, 2-cyclohexyl-

Other names:	2-Cyclohexyl-dodecane Cyclohexane, 1-methylundecyl
Inchi:	InChI=1S/C18H36/c1-3-4-5-6-7-8-9-11-14-17(2)18-15-12-10-13-16-18/h17-18H,3-16H2,1
InchiKey:	ICUZQSKSUXWHFE-UHFFFAOYSA-N
Formula:	C18H36
SMILES:	CCCCCCCCCCC(C)C1CCCCC1
Mol. weight [g/mol]:	252.48
CAS:	13151-82-1

Physical Properties

Property code	Value	Unit	Source
gf	122.69	kJ/mol	Joback Method
hf	-365.81	kJ/mol	Joback Method
hfus	30.69	kJ/mol	Joback Method
hvap	55.70	kJ/mol	Joback Method
log10ws	-6.77		Crippen Method
logp	6.734		Crippen Method
mvol	253.620	ml/mol	McGowan Method
pc	1338.82	kPa	Joback Method
tb	630.35	K	Joback Method
tc	813.84	K	Joback Method
tf	285.00	K	Joback Method
vc	0.971	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	720.29	J/molxK	630.35	Joback Method
cpg	743.68	J/molxK	660.93	Joback Method
cpg	765.91	J/molxK	691.51	Joback Method
cpg	787.01	J/molxK	722.10	Joback Method
cpg	807.04	J/molxK	752.68	Joback Method
cpg	826.01	J/molxK	783.26	Joback Method
cpg	843.97	J/molxK	813.84	Joback Method

dvisc	0.0078543	Paxs	285.00	Joback Method
dvisc	0.0021885	Paxs	342.56	Joback Method
dvisc	0.0008808	Paxs	400.12	Joback Method
dvisc	0.0004457	Paxs	457.68	Joback Method
dvisc	0.0002626	Paxs	515.23	Joback Method
dvisc	0.0001721	Paxs	572.79	Joback Method
dvisc	0.0001218	Paxs	630.35	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C13151821&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/73-819-2/Dodecane-2-cyclohexyl.pdf>

Generated by Cheméo on 2024-04-26 20:41:32.804384753 +0000 UTC m=+16453341.724962074.

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