

Cyclohexane, 1-methyl-3-propyl-

Inchi:	InChI=1S/C10H20/c1-3-5-10-7-4-6-9(2)8-10/h9-10H,3-8H2,1-2H3
InchiKey:	HFHJBWYDQAWSIA-UHFFFAOYSA-N
Formula:	C10H20
SMILES:	CCCC1CCCC(C)C1
Mol. weight [g/mol]:	140.27
CAS:	4291-80-9

Physical Properties

Property code	Value	Unit	Source
gf	50.06	kJ/mol	Joback Method
hf	-215.75	kJ/mol	Joback Method
hfus	14.56	kJ/mol	Joback Method
hvap	37.97	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	3.613		Crippen Method
mcvol	140.900	ml/mol	McGowan Method
pc	2485.07	kPa	Joback Method
tb	445.70 ± 3.00	K	NIST Webbook
tc	639.52	K	Joback Method
tf	205.60	K	Joback Method
vc	0.527	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	299.73	J/mol×K	443.08	Joback Method
cpg	319.51	J/mol×K	475.82	Joback Method
cpg	338.41	J/mol×K	508.56	Joback Method
cpg	356.42	J/mol×K	541.30	Joback Method
cpg	373.57	J/mol×K	574.04	Joback Method
cpg	389.89	J/mol×K	606.78	Joback Method
cpg	405.38	J/mol×K	639.52	Joback Method
dvisc	0.0050164	Pa×s	205.60	Joback Method
dvisc	0.0020679	Pa×s	245.18	Joback Method

dvisc	0.0010906	Pa×s	284.76	Joback Method
dvisc	0.0006724	Pa×s	324.34	Joback Method
dvisc	0.0004605	Pa×s	363.92	Joback Method
dvisc	0.0003397	Pa×s	403.50	Joback Method
dvisc	0.0002646	Pa×s	443.08	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4291809&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/20-066-6/Cyclohexane-1-methyl-3-propyl.pdf>

Generated by Cheméo on 2025-12-19 07:20:48.007145873 +0000 UTC m=+5877045.537186527.

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