

# Cyclohexene,1-propyl-

**Other names:** 1-Propyl-1-cyclohexene; 1-Propylcyclohexene-1.

**InChI:** InChI=1S/C9H16/c1-2-6-9-7-4-3-5-8-9/h7H,2-6,8H2,1H3

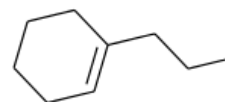
**InChI Key:** WCPWJMLXSZIWOP-UHFFFAOYSA-N

**Formula:** C9H16

**SMILES:** CCCC1=CCCCC1

**Molecular Weight:** 124.22

**CAS:** 2539-75-5



## Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	77.39	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-108.12	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	10.66	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	37.32	kJ/mol	Joback Method
IE	8.43 ± 0.01	eV	NIST Webbook
$\log P_{\text{oct/wat}}$	3.29		Crippen Method
$P_c$	3009.03	kPa	Joback Method
$T_{\text{boil}}$	429.40 ± 5.00	K	NIST Webbook
$T_{\text{boil}}$	427.20 ± 4.00	K	NIST Webbook
$T_c$	636.54	K	Joback Method
$T_{\text{fus}}$	216.09	K	Joback Method
$V_c$	0.46	m <sup>3</sup> /kg-mol	Joback Method

## Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	243.01	J/mol×K	433.68	Joback Method

Property	Value	Unit	Temperature (K)	Source
$\eta$	0.00	Paxs	433.68	Joback Method

## Sources

**Joback Method:** [https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)

**NIST Webbook:**

<http://webbook.nist.gov/cgi/inchi/InChI=1S/C9H16/c1-2-6-9-7-4-3-5-8-9/h7H,2-6,8H2,1H3>

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci9903071>

## Legend

$C_{p,gas}$ : Ideal gas heat capacity (J/mol×K).

$\eta$ : Dynamic viscosity (Paxs).

$\Delta_f G^\circ$ : Standard Gibbs free energy of formation (kJ/mol).

$\Delta_f H^\circ_{gas}$ : Enthalpy of formation at standard conditions (kJ/mol).

$\Delta_{fus} H^\circ$ : Enthalpy of fusion at standard conditions (kJ/mol).

$\Delta_{vap} H^\circ$ : Enthalpy of vaporization at standard conditions (kJ/mol).

**IE**: Ionization energy (eV).

**logP<sub>oct/wat</sub>**: Octanol/Water partition coefficient .

**P<sub>c</sub>**: Critical Pressure (kPa).

**T<sub>boil</sub>**: Normal Boiling Point Temperature (K).

**T<sub>c</sub>**: Critical Temperature (K).

**T<sub>fus</sub>**: Normal melting (fusion) point (K).

**V<sub>c</sub>**: Critical Volume (m<sup>3</sup>/kg-mol).

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