

# trans-Piperitenone oxide

## InChI:

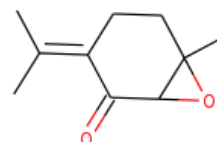
InChI=1S/C10H14O2/c1-6(2)7-4-5-10(3)9(12-10)8(7)11/h9H,4-5H2,1-3H3

**InChI Key:** AKASWINDKIEEBO-UHFFFAOYSA-N

**Formula:** C10H14O2

**SMILES:** CC(C)=C1CCC2(C)OC2C1=O

**Molecular Weight:** 166.22



## Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-34.57	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-298.51	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	16.03	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	46.33	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	1.84		Crippen Method
$P_c$	3127.99	kPa	Joback Method
$T_{\text{boil}}$	547.48	K	Joback Method
$T_c$	780.47	K	Joback Method
$T_{\text{fus}}$	349.91	K	Joback Method
$V_c$	0.51	m <sup>3</sup> /kg-mol	Joback Method

## Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	336.24	J/mol×K	547.48	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/C10H14O2/c1-6\(2\)7-4-5-10\(3\)9\(12-10\)8\(7\)11/h9H,4-5H2,1-3H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C10H14O2/c1-6(2)7-4-5-10(3)9(12-10)8(7)11/h9H,4-5H2,1-3H3)

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci990307l>

## Legend

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

$\Delta_f G^\circ$ : 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).

$\log P_{oct/wat}$ : Octanol/Water partition coefficient .

$P_c$ : Critical Pressure (kPa).

$T_{boil}$ : Normal Boiling Point Temperature (K).

$T_c$ : Critical Temperature (K).

$T_{fus}$ : Normal melting (fusion) point (K).

$V_c$ : Critical Volume (m<sup>3</sup>/kg-mol).

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