

p-mentha-1(7),8-dien-2-yl acetate

Other names: menthadien-2-yl acetate, p-1(7),8.

InChI: InChI=1S/C12H18O2/c1-8(2)11-6-5-9(3)12(7-11)14-10(4)13/h11-12H,1,3,5-7H2,2,4H3

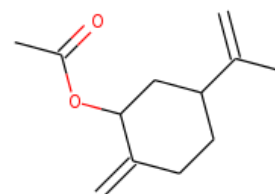
InChI Key: CCLNPVCMIJDLR-UHFFFAOYSA-N

Formula: C₁₂H₁₈O₂

SMILES: C=C(C)C1CCC(=C)C(OC(C)=O)C1

Molecular Weight: 194.27

CAS: 1134-96-9



Physical Properties

| Property | Value | Unit | Source |
|---------------------------------|---------|------------------------|----------------|
| $\Delta_f G^\circ$ | -34.65 | kJ/mol | Joback Method |
| $\Delta_f H^\circ_{\text{gas}}$ | -301.95 | kJ/mol | Joback Method |
| $\Delta_{\text{fus}} H^\circ$ | 18.78 | kJ/mol | Joback Method |
| $\Delta_{\text{vap}} H^\circ$ | 51.15 | kJ/mol | Joback Method |
| $\log P_{\text{oct/wat}}$ | 2.85 | | Crippen Method |
| P_c | 2298.11 | kPa | Joback Method |
| T_{boil} | 560.85 | K | Joback Method |
| T_c | 769.45 | K | Joback Method |
| T_{fus} | 298.26 | K | Joback Method |
| V_c | 0.63 | m ³ /kg-mol | Joback Method |

Temperature Dependent Properties

| Property | Value | Unit | Temperature (K) | Source |
|--------------------|--------|---------|-----------------|---------------|
| $C_{p,\text{gas}}$ | 414.55 | J/mol×K | 560.85 | Joback Method |

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H18O2/c1-8\(2\)11-6-5-9\(3\)12\(7-11\)14-10\(4\)13/h11-12H,1,3,5-7H2,2,4H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H18O2/c1-8(2)11-6-5-9(3)12(7-11)14-10(4)13/h11-12H,1,3,5-7H2,2,4H3)

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

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).

$logP_{oct/wat}$: 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 (m³/kg-mol).

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