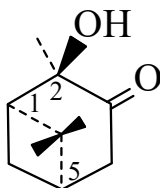




>>Entry Name: **2-Hydroxy-3-pinanone**

**Synonym(s):** 2-Hydroxy-2,6,6-trimethylbicyclo[3.1.1]heptan-3-one, 9Cl. Oxypinone. Oxypinocamphone



(1*R*,2*R*,5*R*)-*form*

**CAS Registry Number:** 10136-65-9

**Molecular Formula:** C<sub>10</sub>H<sub>16</sub>O<sub>2</sub>

**Molecular Weight:** 168.235

**Accurate Mass:** 168.11503

**Percentage Composition:** C 71.39%; H 9.59%; O 19.02%

**Hazard & Toxicity:** LD<sub>50</sub> (mus, scu) 500 mg/kg

>>Variant: (1*R*,2*R*,5*R*)-form

**CAS Registry Number:** 24047-72-1

**Molecular Formula:** C<sub>10</sub>H<sub>16</sub>O<sub>2</sub>

**Molecular Weight:** 168.235

**Accurate Mass:** 168.11503

**Percentage Composition:** C 71.39%; H 9.59%; O 19.02%

**Melting Point:** Mp 37-39°

**Boiling Point:** Bp 245°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>20</sup>+39 (c, 0.5 in CHCl<sub>3</sub>)

**Aldrich:** 40041-6

>>Variant: (1*S*,2*R*,5*S*)-form

**CAS Registry Number:** 20536-50-9

**Molecular Formula:** C<sub>10</sub>H<sub>16</sub>O<sub>2</sub>

**Molecular Weight:** 168.235

**Accurate Mass:** 168.11503

**Percentage Composition:** C 71.39%; H 9.59%; O 19.02%

**Physical Description:** Oil

**Boiling Point:** Bp<sub>0.15</sub> 53-55°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>25</sup>+90.41 (c, 5 in CHCl<sub>3</sub>)

>>Derivative: Ac

**Physical Description:** Cryst. (pentane)

**Melting Point:** Mp 50-51°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>25</sup>-0.33 (c, 12 in CHCl<sub>3</sub>)

>>Variant: (1*S*,2*S*,5*S*)-form

**CAS Registry Number:** 1845-25-6

**Molecular Formula:** C<sub>10</sub>H<sub>16</sub>O<sub>2</sub>

**Molecular Weight:** 168.235

**Accurate Mass:** 168.11503

**Percentage Composition:** C 71.39%; H 9.59%; O 19.02%

**Use/Importance:** Used in asymmetric synth. of amino acids

**Physical Description:** Prisms (pentane)

**Melting Point:** Mp 31-32°

**Boiling Point:** Bp<sub>17</sub> 113-115°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>25</sup>-38.9 (c, 2.64 in CHCl<sub>3</sub>)

**Aldrich:** 38034-2

**Fluka:** 56205