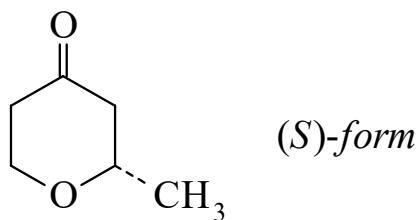




>>Entry Name: 2,3,5,6-Tetrahydro-2-methyl-4*H*-pyran-4-one



**CAS Registry Number:** 1193-20-0

**Related CAS Registry Numbers(s):** 82110-22-3

**Molecular Formula:** C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>

**Molecular Weight:** 114.144

**Accurate Mass:** 114.06808

**Percentage Composition:** C 63.14%; H 8.83%; O 28.03%

>>**Variant:** (*S*)-form

**CAS Registry Number:** 82110-21-2

**Molecular Formula:** C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>

**Molecular Weight:** 114.144

**Accurate Mass:** 114.06808

**Percentage Composition:** C 63.14%; H 8.83%; O 28.03%

**Physical Description:** Liq.

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>25</sup> +20 (c, 1 in CH<sub>2</sub>Cl<sub>2</sub>) (>=95% ee)

>>**Variant:** ( $\pm$ )-form

**CAS Registry Number:** 82065-24-5

**Molecular Formula:** C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>

**Molecular Weight:** 114.144

**Accurate Mass:** 114.06808

**Percentage Composition:** C 63.14%; H 8.83%; O 28.03%

**Physical Description:** Liq.

**Boiling Point:** Bp<sub>13</sub> 61°. Bp<sub>5</sub> 70°

**Density:** d<sub>4</sub><sup>20</sup> 1.02

**Refractive Index:** n<sub>D</sub><sup>20</sup> 1.4469

>>**Derivative:** 2,4-Dinitrophenylhydrazone

**Physical Description:** Yellow needles (methylcyclohexane)

**Melting Point:** Mp 140°

>>**Derivative:** Phenylsemicarbazone

**Physical Description:** Needles (EtOH)

**Melting Point:** Mp 193°

>>**Derivative:** Thiosemicarbazone

**Physical Description:** Yellow cryst. (H<sub>2</sub>O)

**Melting Point:** Mp 150.8°

#### References:

Hanschke, E., *Chem. Ber.*, 1955, **88**, 1053, (*synth, derivs*)

Haslegrave, J.A. *et al.*, *J.A.C.S.*, 1982, **104**, 4666, (*synth, pmr*)

Crawley, G.C. *et al.*, *J.O.C.*, 1995, **60**, 4264, (*synth, pmr, cmr*)