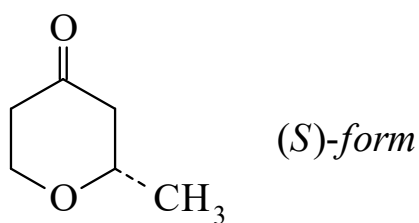




>>Entry Name: 2,3,5,6-Tetrahydro-2-methyl-4*H*-pyran-4-one



CAS Registry Number: 1193-20-0

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

Molecular Formula: C₆H₁₀O₂

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: C₆H₁₀O₂

Molecular Weight: 114.144

Accurate Mass: 114.06808

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

Physical Description: Liq.

Optical Rotation: [α]_D²⁵ +20 (c, 1 in CH₂Cl₂) (>=95% ee)

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

CAS Registry Number: 82065-24-5

Molecular Formula: C₆H₁₀O₂

Molecular Weight: 114.144

Accurate Mass: 114.06808

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

Physical Description: Liq.

Boiling Point: Bp₁₃ 61°. Bp₅ 70°

Density: d₄²⁰ 1.02

Refractive Index: n_D²⁰ 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. (H₂O)

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*)