



**>>Entry Name: Benzyloxycarbonylserine**

**Synonym(s):** *N*-[(Phenylmethoxy)carbonyl]serine, 9Cl. *N*-Carboxyserine *N*-benzyl ester, 8Cl. *Z*-SerOH

**Extra CAS Registry Numbers(s):** 2768-56-1 6081-61-4

PhCH2OOCNHCH(COOH)CH2OH

**Molecular Formula:** C<sub>11</sub>H<sub>13</sub>NO<sub>5</sub>

**Molecular Weight:** 239.227

**Accurate Mass:** 239.079374

**Percentage Composition:** C 55.23%; H 5.48%; N 5.85%; O 33.44%

**>>Variant: D-form**

**CAS Registry Number:** 6081-61-4

**Molecular Formula:** C<sub>11</sub>H<sub>13</sub>NO<sub>5</sub>

**Molecular Weight:** 239.227

**Accurate Mass:** 239.079374

**Percentage Composition:** C 55.23%; H 5.48%; N 5.85%; O 33.44%

**Melting Point:** Mp 115-119°

**Optical Rotation:**  $[\alpha]_D^{26} -5.1$  (c, 4 in AcOH)

**>>Variant: L-form**

**Synonym(s):** (*S*)-form

**CAS Registry Number:** 1145-80-8

**Molecular Formula:** C<sub>11</sub>H<sub>13</sub>NO<sub>5</sub>

**Molecular Weight:** 239.227

**Accurate Mass:** 239.079374

**Percentage Composition:** C 55.23%; H 5.48%; N 5.85%; O 33.44%

**Melting Point:** Mp 121°

**Optical Rotation:**  $[\alpha]_D +5.6$  (c, 6 in AcOH)

**Aldrich:** 86070-0

**Fluka:** 97190

**Sigma:** C5252

**>>Derivative: Me ester**

**CAS Registry Number:** 1676-81-9

**Molecular Formula:** C<sub>12</sub>H<sub>15</sub>NO<sub>5</sub>

**Molecular Weight:** 253.254

**Accurate Mass:** 253.095024

**Percentage Composition:** C 56.91%; H 5.97%; N 5.53%; O 31.59%

**Physical Description:** Oil

**Boiling Point:** Bp<sub>0.01</sub> 170° (Kugelrohr)

**Optical Rotation:**  $[\alpha]_D^{20} +7.4$  (c, 2 in CHCl<sub>3</sub>)

**>>Derivative: Benzyl ester**

**CAS Registry Number:** 21209-51-8

**Molecular Formula:** C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub>

**Molecular Weight:** 329.352

**Accurate Mass:** 329.126324

**Percentage Composition:** C 65.64%; H 5.81%; N 4.25%; O 24.29%

**Melting Point:** Mp 81-82°

**Optical Rotation:**  $[\alpha]_D^{25} -7.5$  (c, 3 in EtOH)

**>>Derivative: 4-Nitrophenyl ester**

**Synonym(s):** *Z*-SerONp

**CAS Registry Number:** 1676-91-1

**Melting Point:** Mp 116-118°

**Optical Rotation:**  $[\alpha]_D^{24} -32$  (c, 1 in DMF + 1% AcOH)