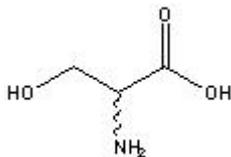


TECHNICAL INFORMATION

Catalog Number: 102868

DL-Serine**Structure:****Molecular Formula:** C₃H₇NO₃**Molecular Weight:** 105.1**CAS # :** 302-84-1**Synonym:** DL-2-Amino-3-hydroxypropionic acid**Physical Description:** White crystalline powder**Solubility:** Soluble in water (40 mg/ml-clear, colorless solution)**Typical purity testing:**

Transfer 0.6 gram, accurately weighed, into a 250 ml beaker and add 50 ml of anhydrous glacial acetic acid and 10 drops of bromothymol blue indicator (0.1% w/v in glacial acetic acid). Titrate with 0.2 M perchloric acid (17.3 ml of 70% perchloric acid and 41 ml of acetic anhydride to 1 liter with glacial acetic acid) to the disappearance of the yellow color. Standardize the 0.2 M perchloric acid with 0.250 gm of Na₂CO₃ on each day used.

Calculations:

$$\text{Purity (\%)} = \frac{A \times B \times 105.09}{\text{Sample Weight}} \times 100$$

Where:

A = Concentration of perchloric acid (moles/liter)

B = Volume of acid used in liters

Limits: 98.0 to 101.0%