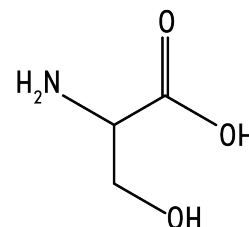


Product Specification

Product Name	L-Serine
Compendia	USP/EP/JP
CAS #	56-45-1
Formula	C ₃ H ₇ NO ₃
Molecular Weight	105.09
Description	White crystals or crystalline powder; slightly sweet taste.
Solubility	Freely soluble in water and in formic acid, practically insoluble in ethanol (99.5). Dissolves in 2 mol/ L hydrochloric acid.
Identification	Compare the infrared absorption spectrum of the sample with that of the standard by potassium bromide disc method.



Test	Specification
Specific Rotation @ 20°C	+14.4 to +15.5°
State of Solution	Clear and colorless; Not less than 98.0%
Chloride (Cl)	Not more than 0.020%
Ammonium (NH₄)	Not more than 0.02%
Sulfate (SO₄)	Not more than 0.020%
Iron (Fe)	Not more than 10 ppm
Heavy Metals (Pb)	Not more than 10 ppm
Arsenic (As₂O₃)	Not more than 1 ppm
Related Substances	1) Conforms 2) Any unspecified impurity: Not more than 0.20%; Total impurities: Not more than 0.50%
Loss on Drying	Not more than 0.20%
Residue on Ignition (Sulfated)	Not more 0.10%
Assay	98.5 to 101.0%
pH	5.2 to 6.2
Endotoxin	Less than 6.0 EU/g