

Trafa Pharmaceutical Inc.

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SPECIFICATION SHEET

Product Name	L-SERINE
TEST ITEMS	SPECIFICATIONS
Description	White crystals or crystalline powder
Identification by IR	Pass test
State of Solution	Not less than 98.0%
pH	5.2 ~ 6.2%
Specific Rotation (at 20°C)	+14.40 - +15.50
(at 25°C)	$+14.0^{\circ} \sim 15.6^{\circ}$
Ammonium (NH4)	Not more that 0.020%
Chloride (Cl)	Not more than 0.020%
Sulfate (SO4)	Not more than 0.020%
Iron (Fe)	Not more than 10 ppm
Heavy Metals (as Pb)	Not more than 5 ppm
Lead (Pb)	Not more than 5 ppm
Arsenic (As 203)	Not more than 1 ppm
Loss on Drying	Not more than 0.20%
Residue on Ignition	Not more than 0.10%
Foreign Amino Acids	Not more than 0.20% (TLC, 100μg)
Assay (Dry basis)	99.0 ~ 101.0%
Total Plate Count	Not more than 1000 cfu/g
Fungal Count	Not more than 100 cfu/g
E. Coli	Negative

Meets the requirements of the current JP USP EP and FCC.

No organic volatile impurities as identified in the current USP are introduced in the manufacturing process of the above described commodity

Note: The above information is based on the certificate of analysis received from the manufacturer of this product and not intended as a substitute for strict quality control analysis by the purchaser of this product.

Reviewed by:

Abdullah Malik (QA)