

TRADING

2000 s.r.l.

SPECIFICATIONS

L - ARGININA HCL

| | |
|----------------------|-------------------------------------|
| Appearance | white crystal or crystalline powder |
| Identification by IR | pass test |
| Ph | 4.7 – 6.2 |
| Specific rotation | +21.5 -- +23.5° |
| Arsenic | <= 1 PPM |
| State of solution | >= 98% |
| Ammonium | <= 0.02% |
| Chloride content | 16.6 – 17.0% |
| Sulphate | <= 0.020% |
| Iron | <= 10 PPM |
| Heavy metals (as Pb) | <= 5 PPM |
| Foreign amino acids | <= 0.4% |
| Loss on drying | <= 0.20% |
| Residue on ignition | <= 0.10% |
| Assay (dried basis) | 99.0 – 101. 0% |

We hereby certify that the commodity described above meets the requirements of the current JP USO EP and FCC.