

Product Specification

Product Name L-Alanine USP/EP/JP Compendia 56-41-7 CAS# $C_3H_7NO_2$ **Formula** Molecular Weight 89.09

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 .6 mol/L hydrochloric acid.

Identification Compare the infrared absorption spectrum of the

sample with that of the standard by potassium

bromide disc method.

$H_{\lambda}N_{\lambda}$

Test

Specification

+14.3 to +15.2° Specific Rotation @ 20°C

State of Solution Clear and colorless: Not less than 98.0%

Not more than 0.020% Chloride (Cl) Not more than 0.02% Ammonium (NH₄) Sulfate (SO₄) Not more than 0.020% Iron (Fe) Not more than 10ppm Heavy Metals (Pb) Not more than 10ppm Arsenic (As₂O₃) Not more than 1ppm

1) Any unspecified impurity: Not more than **Related Substances**

> 0.10%; Total impurities: Not more than 0.50%. 2) Maleic acid: Not more than 0.50%; Malic acid: Not more than 0.05%; Fumaric acid: Not more than 0.05%; Any unspecified impurity: Not more than 0.05%; Total unspecified impurities:

Not more than 0.20%. Not more than 0.20%

Loss on drying Residue on Ignition (Sulfated) Not more than 0.10% 98.5 to 101.0% **Assay**

pН 5.7 to 6.7

Endotoxin Less than 6.0 EU/g