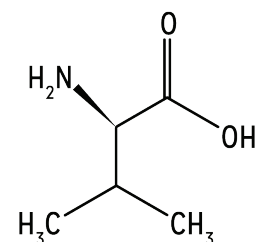


Product Specification

Product Name	L-Valine
Compendia	USP/EP/JP
CAS #	72-18-4
Formula	C ₅ H ₁₁ NO ₂
Molecular Weight	117.15
Description	White crystals or crystalline powder; tastes at first slightly sweet and then bitter.
Solubility	Freely soluble in formic acid, soluble in water, practically insoluble in ethanol (95). Dissolves in dilute 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	+27.6 to +28.7°
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 10ppm
Heavy Metals (Pb)	Not more than 10ppm
Arsenic (As₂O₃)	Not more than 1ppm
Related Substances	1) Conforms 2) Isoleucine: Not more than 0.40%; Any unspecified impurity: Not more than 0.20%; Total impurities: Not more than 1.00%
Loss of Drying	Not more than 0.20%
Residue on ignition (Sulfated)	Not more than 0.10%
Assay	98.5 to 101.0%
pH	5.5 to 6.5
Endotoxin	Less than 6.0EU/g