

**Specification for L-Valine, USP, JP, bioCERTIFIED (TM)
(V9100)**

Item Number	V9100
Item	L-Valine, USP, JP, bioCERTIFIED (TM)
CAS Number	72-18-4
Molecular Formula	C ₅ H ₁₁ NO ₂
Molecular Weight	117.15
MDL Number	
Synonyms	

Test	Specification	
	Min	Max
ASSAY (DRIED BASIS)	98.5	101.0 %
pH	5.5	6.5
SPECIFIC ROTATION (EP), [α] _D 20	+26.5° to 29.0°	
SPECIFIC ROTATION (USP), [α] _D 25	+26.6° to 28.8°	
APPEARANCE OF SOLUTION	Clear, colorless	
LOSS ON DRYING		0.20 %
RESIDUE ON IGNITION (SULFATED ASH)		0.10 %
RELATED SUBSTANCES (JP-TLC METHOD)	Conforms	
RELATED COMPOUNDS (USP-TLC METHOD):		
ANY UNSPECIFIED IMPURITY		0.5 %
Total impurities		2.0 %
AMMONIUM		0.02 %
CHLORIDE (Cl)		0.021 %
SULFATE (SO ₄)		0.028 %
IRON (Fe)		30 ppm
HEAVY METALS (Pb)		20 ppm
ARSENIC (As ₂ O ₃)		2 ppm
ELEMENTAL IMPURITIES	AS REPORTED	
BACTERIAL ENDOTOXINS		6.0 EU/g
TOTAL MICROORGANISM		100 CFU/g
MOLD		10 CFU/g
IDENTIFICATION	TO PASS TEST	
EXPIRATION DATE		
DATE OF MANUFACTURE		

Test	Specification	
	Min	Max
APPEARANCE		
RESIDUAL SOLVENTS	TO PASS TEST	

Spectrum Chemical Mfg Corp

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