

# CERTIFICATE OF ANALYSIS

Product Description L-VALINE  
Product Number V878  
Lot Number HGA0878002  
Storage Temperature Room Temperature  
Molecular Weight 117.17  
Formula  $C_5H_{11}NO_2$   
CAS Number 72-18-4

## Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pH	Under Development	6.1
Physical Appearance Color* Texture	PM-1 to PM-4 Crystalline Powder w/ Flakes	PM-4 White Crystalline Powder w/ Flakes
Solution Appearance Clarity Color	Clear Colorless	Clear Colorless
Average Time to Dissolve	For Information Only (Within 1 min)	Passes
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	Minimum 98%	99.80%

## Biological Testing:

Test Concentration: 100 mg/L

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
Supports and/or facilitates plant growth and/or shoot proliferation in two or more plant tissue cultured lines with no morphological aberrations to plants	Achimenes	Passes
	Tobacco Callus	Passes

The material described in this certificate is synthetic in nature. No animal- or plant-derived components were used in the manufacture of this product.

**PhytoTech Labs Inc. provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTech Labs Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

Date of Release: 29 September-2020  
Recommended Shelf Life Date: September -2028



David S. Hart  
Technical Services Manager