CERTIFICATE OF ANALYSIS

Product Description Timentin (Ticarcillin Disodium/ Clavulanate Potassium)

Product Number T 869
Lot Number 02A86908
Storage Temperature 0-5° C
Molecular Weight 428.4/237.3

Formula $C_{15}H_{14}N_2Na_2O_6S_2/C_8H_8KNO_5$

CAS Number 4697-14-7/61177-45-5

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|-----------------------------------|---------------------|-------------------------|
| Solubility | Soluble in Water | Complies |
| pH (0.05 g/L) | 4.5-5.5 | 4.54 |
| Physical Appearance | | |
| Color* | 2024-70 (Lemon Ice) | 2025-70 (Barely Yellow) |
| | 2022-70 to 2026-70 | |
| Texture | Crystalline Powder | Crystalline Powder |
| Solution Appearance | Clear | Clear |
| | Colorless | Colorless |
| Average Time to Dissolve | Within 1 min | Within 1 min |
| Precipitation Formation | None | None |
| Purity (Ticarcillin/ Clavulanate) | > 98%/ > 99% | 98.7%/ 101.3% |

^{*} Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color PreviewTM).

Biological Testing:

| TEST SPECIFICATION | PLANT CELL LINE | RESULTS |
|-----------------------------------|-----------------|------------------------------------|
| Supports and/or facilitates plant | Boston Fern | Passes—supported plant growth |
| growth and/or shoot proliferation | | and/or shoot proliferation with no |
| in two or more plant tissue | | morphological aberrations to |
| cultures | | plants |
| | Hosta | Passes—supported plant growth |
| | | and/or shoot proliferation with no |
| | | morphological aberrations to |
| | | plants |

The material described in this certificate was manufactured in the United State of America and is of synthetic nature. No animal or plant components were used in the manufacture of this product.

Phyto Technology Laboratories, LLC provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. Phyto Technology Laboratories 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.

| Laura L. Williams | |
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| Ouality Control Technician | |