

CERTIFICATE OF ANALYSIS

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| Product Description | RIBOFLAVIN, USP GRADE 7,8-DIMETHYL-10-(D-RIBO-2,3,4,5-TETRAHYDROXYPENTYL)- ISOALLOXAZINE; VITAMIN B ₂ |
| Product Number | R779 |
| Lot Number | HWW0779005 |
| Storage Temperature | Room Temperature |
| Molecular Weight | 376.36 g/mol |
| Formula | C ₁₇ H ₂₀ N ₄ O ₆ |
| CAS Number | 83-88-5 |

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|---|--|----------------------|
| Solubility | Soluble in 1N KOH @ 1 mg/mL | Passes |
| Physical Appearance Color* | 2018-20 to 2021-20 or 2018-30 to 2021-30 | 2019-20 Orange |
| Texture | Fine Powder, may form clumps | Fine Powder |
| Solution Appearance Clarity Color | Clear Light Yellow to Dark Yellow w/a Green Tint | Clear Dark Yellow |
| Average Time to Dissolve | For Information Only (Approx. 3 mins) | Passes |
| Insolubles | None | Passes |
| Purity | 98.0% | 99.70% |
| FTIR | Conforms to Structure | Passes |

* Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color Preview™).

Biological Testing:

Test Concentration: 1.0 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 | Xanthi Tobacco Callus | Passes |
| | Perilla Fantasy | Passes |

This material is derived from microbial fermentation and highly purified and considered semi-synthetic. 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: 30-June-2023

Recommended Shelf-Life Date: June 2031



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