# CERTIFICATE OF ANALYSIS

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| Product Description | INDOLE-3-BUTYRIC ACID<br>IBA; 4-[3-INDOLYL]BUTYRIC ACID |
| Product Number | I538 |
| Lot Number | 16E0538023 |
| Storage Temperature | 2-6 ˚C |
| Molecular Weight | 203.24 |
| Formula | $C_{12}H_{13}NO_2$ |
| CAS Number | 133-32-4 |

## Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|---|---|---|
| Solubility | Soluble in 1N KOH @ 1 mg/mL | Passes |
| Physical Appearance<br>Color*<br><br><br>Texture | <br>2156-60 to 2162-60 or<br>2156-70 to 2162-70,<br>PM-1 to PM-4<br>Fine to Crystalline Powder | <br><br>2157-70 Cream<br><br>Crystalline Powder |
| Solution Appearance<br>Clarity<br>Color | <br>Clear<br>Colorless | <br>Clear<br>Colorless |
| Average Time to Dissolve | For Information Only<br>(Approx. 1 min) | 1 min |
| Insolubles | None | Passes |
| FTIR | Conform to Structure | Passes |
| Purity by HPLC | Minimum 98% | 98.8% |
| Loss on Drying | For Information Only | 0.32% |

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

## Biological Testing:

Test Concentration: 2.0 mg/L

| TEST SPECIFICATION | PLANT CELL LINE | RESULTS |
|---|---|---|
| Supports and/or facilitates shoot growth and/or rooting/callus formation in two or more plant tissue culture lines at 1 mg/mL with no morphological aberrations to plants | Lily | Passes |
| | Hosta | Passes |

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

***Phyto*Technology Laboratories® 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.**

Recommended Shelf Life Date: June 2021

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*Created on 9 June 2016 JN*