

# AUXINS AND ROOTING HORMONES

*PhytoTechnology Laboratories offers a variety of auxins that can be used to induce root induction in plants. These products have been tested for plant tissue culture applications to insure the highest quality products*



| CATALOGUE NUMBER | PRODUCT DESCRIPTION   | PKG SIZE             | QTY                  | PRICE |
|------------------|---|----------------------|----------------------|-------|
| I 538            | INDOLE-3-BUTYRIC ACID<br>(IBA: 4-[3-Indolyl]butyric acid)<br>Plant Tissue Culture<br>Tested | 5 g<br>25 g<br>100 g | EACH<br>EACH<br>EACH |       |

## PRODUCT SPECIFICATIONS

|                       |   |
|-----------------------|---|
| STORAGE TEMPERATURE   | 0-5 C   |
| MOLECULAR WEIGHT      | 203.24  |
| FORMULA               | $C_{12}H_{13}NO_2$  |
| CAS NUMBER            | 133-32-4  |
| PHYSICAL APPEARANCE   | White To Off-White Powder   |
| TITRATION             | >98%  |
| SOLUBILITY            | 5% MeOH; Clear Lt. Brown Solution   |
| WATER (Karl Fischer): | <2%   |
| MELTING POINT:        | 122-124 C   |
| ELEMENTAL ANALYSIS:   | C—70.9%<br>H—6.45%<br>N—6.89%   |
| TLC:                  | 8EtOH : 2 H <sub>2</sub> O; One Spot  |
| INFRARED:             | Reference:  |
| BIOLOGICAL TESTING    | Supports or Facilitates Plant Growth and/or Shoot Proliferation in two or more plant tissue cultures. |

## PRODUCT NOTES:

|                            |  |
|----------------------------|--|
| HAZARD RISK (R:)           | 25-36/37/39  |
| SAFETY PRECAUTIONS (S:)    | 36/37/39-45-26   |
| HARMONIZED COMMODITY CODE: | 2915 60 19 00  |
| OTHER NOTES:               | Auxin like plant growth regulator Store liquid stock solutions at 0-5 C Sterilization: Autoclave/filtration_Recommended Concentration: 0.01 to 10.0 mg/L |

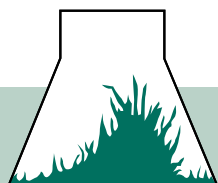
| CATALOGUE NUMBER | PRODUCT DESCRIPTION                              | PKG SIZE                      | QTY                          | PRICE |
|------------------|--|-------------------------------|------------------------------|-------|
| I 560            | INDOLE-3-BUTYRIC ACID<br>Potassium Salt<br>K-IBA | 5 g<br>25 g<br>100 g<br>500 g | EACH<br>EACH<br>EACH<br>EACH |       |

## PRODUCT SPECIFICATIONS

|                                    |   |
|------------------------------------|---|
| STORAGE TEMPERATURE                | 0-5 C   |
| MOLECULAR WEIGHT:                  | 241.3   |
| FORMULA:                           | $C_{12}H_{12}NO_2K$   |
| CAS NUMBER                         | 60096-23-3  |
| PHYSICAL APPEARANCE:               | White To Off-White Powder   |
| ASSAY                              | 99+%  |
| PURITY (By TLC)                    | One Spot  |
| WATER (Karl Fischer):              | <1.0%   |
| IR                                 | Conforms to Known Reference   |
| SOLUBILITY (5 in H <sub>2</sub> O) | Clear, Colorless to Light Yellow  |
| pH                                 | 6.0 to 8.0  |
| BIOLOGICAL TESTING                 | Supports or Facilitates Plant Growth and/or Shoot Proliferation in two or more plant tissue cultures. |

## PRODUCT NOTES:

|                            |               |
|----------------------------|---------------|
| HAZARD RISK (R:)           |               |
| SAFETY PRECAUTIONS (S:)    |               |
| HARMONIZED COMMODITY CODE: | 2915 60 19 00 |
| OTHER NOTES:               |               |



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# PRODUCT UPDATES

# AUXINS AND ROOTING HORMONES

| CATALOGUE NUMBER | PRODUCT DESCRIPTION   | PKG SIZE               | QTY                  | PRICE |
|------------------|---|------------------------|----------------------|-------|
| N 600            | $\alpha$ -NAPHTHALENEACETIC ACID<br>(NAA; 1-Naphthaleneacetic Acid)<br>Plant Tissue Culture<br>Tested | 25 g<br>100 g<br>500 g | EACH<br>EACH<br>EACH |       |

## PRODUCT SPECIFICATIONS

|                                |   |
|--------------------------------|---|
| <b>STORAGE TEMPERATURE</b>     | RT  |
| <b>MOLECULAR WEIGHT</b>        | 186.2   |
| <b>FORMULA</b>                 | $C_{12}H_{10}O_2$   |
| <b>CAS NUMBER</b>              | 59-67-6   |
| <b>PHYSICAL APPEARANCE</b>     | White To Pale Yellow Powder   |
| <b>SOLUBILITY</b>              | 5% MeOH; Clear, Slightly Yellow Solution  |
| <b>WATER (Karl Fischer):</b>   | <3.0%   |
| <b>MELTING POINT:</b>          | 284 $\pm$ 4C  |
| <b>ASSAY, TITRATION (NaOH)</b> | 97+%  |
| <b>ELEMENTAL ANALYSIS:</b>     | C—77.4%—Theoretical<br>H—5.41%—Theoretical<br>N—0.00%—Theoretical                                     |
| <b>INFRARED:</b>               | Reference:  |
| <b>ULTRAVIOLET</b>             | $E_{281}U$ 6,000; (Extraction in H <sub>2</sub> O)  |
| <b>BIOLOGICAL TESTING</b>      | Supports or Facilitates Plant Growth and/or Shoot Proliferation in two or more plant tissue cultures. |

## PRODUCT NOTES:

|                                   |  |
|-----------------------------------|--|
| <b>HAZARD RISK (R:)</b>           | 22   |
| <b>SAFETY PRECAUTIONS (S:)</b>    | 24/25  |
| <b>HARMONIZED COMMODITY CODE:</b> | 2915 90 30 00  |
| <b>OTHER NOTES:</b>               | Auxin like plant growth regulator<br>Soluble in KOH or NaOH<br>Store liquid stock solutions at 0-5 C<br>Recommended Concentration: 0.01 to 10.0 gm/L<br>Sterilization: Autoclave |

| CATALOGUE NUMBER | PRODUCT DESCRIPTION  | PKG SIZE             | QTY                  | PRICE |
|------------------|--|----------------------|----------------------|-------|
| I 885            | INDOLE-3-ACETIC ACID<br>(IAA; Heteroauxin)<br>Plant Tissue Culture<br>Tested | 5 g<br>25 g<br>100 g | EACH<br>EACH<br>EACH |       |

## PRODUCT SPECIFICATIONS

|                              |   |
|------------------------------|---|
| <b>STORAGE TEMPERATURE</b>   | -20 to 0 C  |
| <b>MOLECULAR WEIGHT:</b>     | 175.2   |
| <b>FORMULA:</b>              | $C_{10}H_9NO_2$   |
| <b>CAS NUMBER</b>            | 00087-51-4  |
| <b>PHYSICAL APPEARANCE:</b>  | Light Tan Crystalline Powder  |
| <b>SOLUBILITY</b>            | 5.0% in EtOH; Clear Reddish Brown Solution  |
| <b>ASSAY (By Titration)</b>  | 98+%  |
| <b>ELEMENTAL ANALYSIS:</b>   | C—68.6%—Theoretical<br>H—5.18%—Theoretical<br>N—8.00%—Theoretical                                     |
| <b>MELTING POINT:</b>        | 165 $\pm$ 5C  |
| <b>WATER (Karl Fischer):</b> | <1.0%   |
| <b>TLC</b>                   | 7 n-PrOH: 3 NH <sub>4</sub> OH; One Spot  |
| <b>INFRARED:</b>             | Reference:  |
| <b>ULTRAVIOLET</b>           | $E_{281} >$ 5,500; (Extraction in MeOH)   |
| <b>BIOLOGICAL TESTING</b>    | Supports or Facilitates Plant Growth and/or Shoot Proliferation in two or more plant tissue cultures. |

## PRODUCT NOTES:

|                                   |  |
|-----------------------------------|--|
| <b>HAZARD RISK (R:)</b>           | 22-24/25   |
| <b>SAFETY PRECAUTIONS (S:)</b>    | 22-24/25   |
| <b>HARMONIZED COMMODITY CODE:</b> | 2915 90 30 00  |
| <b>OTHER NOTES:</b>               | Auxin plant growth regulator<br>Soluble in EtOH, KOH, NaOH<br>Store liquid stock solutions at -20 to 0 C<br>Sterilization: Autoclave or Filtration<br>Recommended Concentration: 0.01 to 10.0 mg/L |

## PLANT GROWTH REGULATOR CONVERSION CHART

Preparation Directions: Dissolve each component in isopropyl alcohol and bring to volume in one quart (1 liter) of water.

| Weight    | Approximate Measurement      | Percent Concentration | Concentration (PPM) |
|-----------|------------------------------|-----------------------|---------------------|
| 10 grams  | 2 tablespoons<br>6 teaspoons | 1%                    | 10,000              |
| 5 grams   | 1 tablespoon<br>3 teaspoons  | 0.5%                  | 5,000               |
| 2.5 grams | 1 1/2 teaspoon               | 0.25%                 | 2,500               |
| 1.0 gram  | 1/4 teaspoon                 | 0.1%                  | 1,000               |

For best results, we recommend that fresh solutions be prepared each day. If solutions are stored, store refrigerated in a dark bottle. Do not store solutions for more than one week. Protect the solutions from light.

### Recommended Rooting Concentrations:

|                 |   |
|-----------------|---|
| 1000-2500 ppm   | Herbaceous, soft succulent cuttings       |
| 2500-7500 ppm   | Soft wood, semi-hardwood cuttings         |
| 7500-15,000 ppm | Hardwood, and Deciduous hardwood cuttings |

TO PLACE AN ORDER CONTACT YOUR DISTRIBUTOR:



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