

### Product Information Sheet

## L452

### Linsmaier & Skoog Modified Basal Medium w/ 30 g/L Sucrose & 7 g/L Agar pH Adjusted and Buffered

Synonym: Murashige & Skoog (MS) Medium with Minimal Organics (MSMO)

#### Properties

|                                 |   |
|---------------------------------|---|
| Form:                           | Powder  |
| Appearance:                     | White to Yellow   |
| Application:                    | Plant Tissue Culture  |
| Solubility:                     | Soluble in Water  |
| Typical Working Concentration:  | 42.53 g/L   |
| Storage Temp:                   | 2 – 6 °C  |
| Storage Temp of Stock Solution: | Preparation of concentrated solutions is not recommended as insoluble precipitates may form.    |
| Other Notes:                    | Contains the macro- and micronutrients and vitamins as described by Linsmaier and Skoog (1965). |

#### Formula (mg/L)

|   |       |
|---|-------|
| Ammonium Nitrate                              | 1650  |
| Boric Acid                                    | 6.2   |
| Calcium Chloride, Anhydrous                   | 332.2 |
| Cobalt Chloride•6H <sub>2</sub> O             | 0.025 |
| Cupric Sulfate•5H <sub>2</sub> O              | 0.025 |
| Na <sub>2</sub> EDTA•2H <sub>2</sub> O        | 37.26 |
| Ferrous Sulfate•7H <sub>2</sub> O             | 27.8  |
| Magnesium Sulfate                             | 180.7 |
| Manganese Sulfate•H <sub>2</sub> O            | 16.9  |
| Molybdc Acid (Sodium Salt) •2H <sub>2</sub> O | 0.25  |
| Potassium Hydroxide                           | 100   |

|                                |        |
|--------------------------------|--------|
| Potassium Iodide               | 0.83   |
| Potassium Nitrate              | 1900   |
| Potassium Phosphate, Monobasic | 170    |
| Zinc Sulfate•7H <sub>2</sub> O | 8.6    |
| Agar                           | 7000   |
| MES (Free Acid)                | 1000   |
| myo-Inositol                   | 100    |
| Sucrose                        | 30,000 |
| Thiamine•HCl                   | 0.4    |

#### Application Notes

Plant Tissue Culture Tested

This medium is the standard Murashige & Skoog (MS) basal salts supplemented with Linsmaier and Skoog vitamins. The medium is pH adjusted and buffered with MES. Under most circumstances, adjusting the pH is not necessary; simply add water and any desired PGR's or other supplements. The addition of MES will help to stabilize pH fluctuations during media preparation and culture.

#### India Contact

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L452-info

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### References

Linsmaier, EM and F Skoog. 1965. Organic growth factor requirements of tobacco tissue culture. *Physiol. Plant.* 18:100-127.

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