

## Murashige and Skoog Minimal Organic Powder Medium

Cat. No. 47515

### Product Description:

**General** Murashige and Skoog medium<sup>1</sup>, originally formulated for support tobacco callus, has been used to support callus initiation and growth, the growth of cells in suspension culture and the regeneration of shoots and plantlets from explants.

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**Composition** Without sucrose and without agar, with i-inositol and thiamine hydrochloride

**Supplements** Sucrose (Cat. No. 35579) 30 g/l  
Agar 8 g/l

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**Storage** Store powder dry at +2 °C – +8 °C. Keep container tightly closed, because powder is very hygroscopic. Liquid medium can be stored at +2 °C - +8 °C in the dark (media containing indole-3-acetic acid are only stable for 1 – 2 weeks.). *Colour change, granulation/clumping, insolubility, pH change and bad growth promotion are signs of deterioration of the medium.*

### Solution procedure:

To prepare 1 l medium:

1. Fill ca. 800 ml distilled water in a 1-liter flask and add 4.62 g powder medium while stirring slowly.
2. Add sucrose and other reagents if applicable and solve while stirring. Fill then up to a volume of 950 ml.
3. Adjust pH with 1 N NaOH or 1 N HCl for liquid media to ca. 5.0 and for media containing agar to 5.7 with stirring. Fill up to 1 l with dest. water.
4. Autoclave at 121 °C for 15 min. (1 kg/cm<sup>2</sup>).

*Attention:* Add additional heat labile supplements after autoclaving to the cooled medium under sterile conditions. Media that contain agar have to be heated with stirring until the mixture is completely solved, do not boil.

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<sup>1</sup> Murashige, T. & Skoog, F. (1962) Physiol. Plant. 15, 473 - 497