

## Product Information

### WHITE'S BASAL SALT MIXTURE

Product No. **W0876**

#### Product Description

This powder is extremely hygroscopic and must be protected from atmospheric moisture. Do not open the container until its contents are allowed to warm to room temperature. If possible the entire contents of the package should be used immediately after opening.

<u>Contents:</u>	<u>mg/L</u>
Boric Acid	1.50
Calcium Nitrate (vacuum-dried)	200.0
Ferric Sulfate	2.50
Magnesium Sulfate Anhydrous	360.0
Manganese Sulfate Monohydrate	5.040
Potassium Chloride	65.0
Potassium Iodide	0.750
Potassium Nitrate	80.0
Sodium Phosphate Monobasic	16.50
Sodium Sulfate Anhydrous	200.0
Zinc Sulfate Heptahydrate	2.670

*0.934 g of powder required to prepare 1 L of medium*

**THIS PRODUCT IS INTENDED FOR  
LABORATORY USE ONLY. NOT FOR DRUG,  
HOUSEHOLD, OR OTHER USES.**

#### Preparation

Preparing this product in a concentrated form is not recommended as some salt complexes may precipitate. Supplements may be added prior to sterilization or added aseptically to a sterile medium. The nature of the supplement (i.e. heat lability) may require filter sterilization of the component and also may affect the shelf life of the medium. The basic steps for preparing culture medium are the following:

Using a container twice the size of the desired final volume, measure out approximately 90% of

the final required volume of tissue culture grade water (Product No. W3500). Example: 900 ml for a final volume of 1000 ml.

1. While stirring, add the powdered product.
2. Rinse the original medium bottle with a small volume of tissue culture grade water to remove traces of the powder. Add to the solution in Step 2.
3. Add any desired supplements (e.g. vitamins, sucrose, agar, auxin, cytokinin, etc.).
4. While stirring, adjust to the desired pH (e.g. 5.7+/- 0.1) using KOH, NaOH, or HCl.
5. Add water to bring the medium to the final volume.
6. If gelling agent is used, heat the solution to approx. 100°C while stirring.
7. Dispense the medium into culture vessels unless heat labile components must be added or the medium is to be dispensed aseptically into sterile containers after autoclaving.
8. Sterilize the medium in a validated autoclave at 1Kg/cm<sup>2</sup> (15 psi). The medium should attain a temperature of 121°C for at least 15 min. Refer to the Sigma Plant Cell Culture Catalog for recommended autoclave times for different volumes.

#### Storage

All media preparations should be stored at 0-5°C. Store dry powder in a desiccator. Deterioration of powdered medium may be recognized by:

- 1) granulation, clumping, or particulate matter throughout the powder;
- 2) pH change; and
- 3) inability to promote cell growth when properly used.

#### Specifications

Appearance: White powder  
Moisture content: < 10%  
Solubility: Clear solution, colorless  
pH +/- 0.5 RT before adjustment: 4.7

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