TP 094 – DKW BASAL MEDIUM WITH VITAMINS

INTENDED USE

This medium was developed for the multiplication of shoots from nodal explants. The medium was supplemented with 4.5 µM BA and 5 nM IBA. Rooting the shoots was enhanced by dipping the basal ends of the shoots in 5 mM IBA prior to transferring to the greenhouse

COMPOSITION

Ingredients	Mg / Ltr
Ammonium nitrate	1416
Boric acid	4.8
Calcium chloride , Anhydrous	112.5
Calcium Nitrate	1367
Cupric sulphate pentahydrate	0.25
Sodium –EDTA.2H2O	45.4
Ferrous Sulfate. 7H2O	33.8
Magnesium Sulfate, Anhydrous	361.49
Manganese sulphate .H2O	33.5
Molybdic Acid (sodium salt). 2H2O	0.39
Nickel Sulfate	0.005
Potassium Phosphate, Monobasic	265
Potassium Sulfate	1559
Zinc Nitrate·6H2O	17
myo-Inositol	100
Glycine	2.0
Nicotinic Acid	1.0
Thiamine - HCl	2.0

[Formula Wt. 5.32 g/ltr]

QUALITY CONTROL SPECIFICATIONS

Appearance : White to Yellow colour powder.
Solubility : Colorless to slight yellow solution, clear, completely soluble
pH (at 25°C) : 4.8±-0.2

INSTRUCTION FOR USE

Dissolve 5.32 gm/ltr. Of dehydrated medium in 1000ml of distilled or deionized water at room temperature (15- 30ºC). Rinse media vial with small quantity of distilled water to remove traces of powder. Add the desired heat stable supplements prior to autoclaving.
Continue stirring until the powder has dissolved. The pH of medium is adjusted by using 1N HCl/ 1N NaOH/ 1N KOH. This step is given as optional as the media is too hygroscopic. Make up the final volume to 1000ml with distilled water. Mix gently, heat and rotate between intervals until the solution becomes clear. Do not boil, reheat and allow cooling

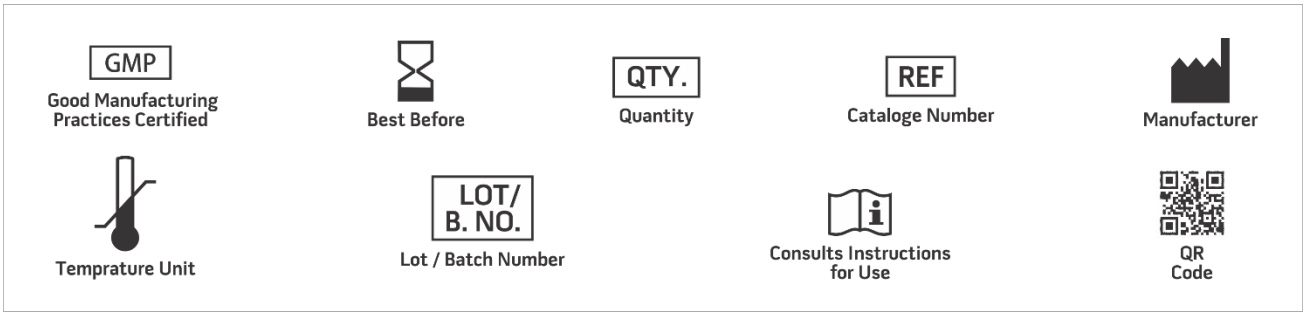
below 50ºC then autoclave at 15psi (121ºC) for 15 minutes, using a slow exhaust cycle. Higher temperatures and/or longer times are not recommended. Cool the autoclaved culture vessels containing medium to 45-50ºC and aseptically add desired sterile heat- labile substrate.
Note: Media should be prepared according to formula mentioned on the label however, it is recommended to use an entire container at once. Heat-labile substrates should be added, after autoclaving**.**

Storage Temperature and Shelf Life

Store product at 2-8°C. Powdered microelements are hygroscopic and must be protected from atmospheric moisture & bright light. Use before expiry date.
Shelf life of product is 24 months.

Reference

1. Murashige T. & Skoog F., Physiol. Plant., (1962), 15, 473 – 497.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
Revision: 14 May., 2026