

TP 057 – RUGINI OLIVE MEDIUM (With Vitamins, W/O Sucrose & Agar)

INTENDED USE

Supports or facilitate plant growth and/or shoot proliferation in two or more plant tissue cultures (both in monocotyledons and dicotyledons).

COMPOSITION

Potassium dihydrogen phosphate 340.000 Potassium nitrate 1100.000 Magnesium sulphate 732.600 Ammonium nitrate 412.000 Cobalt chloride (Hexahydrate) 0.025 Copper sulphate (pentahydrate) 0.250
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Copper sulphate (pentahydrate) 0.250
Boric acid 12.400
Ferrous sulphate .7H2O 27.800
EDTA disodium salt.2H2O 37.300
Potassium chloride 500.000
Potassium iodide 0.830
Manganese sulphate. H2O 16.900
Na2MoO4.2H2O 0.250
Zinc sulphate (Heptahydrate) 14.300
Calcium chloride.2H2O 440.000
Calcium nitrate 416.920
Glycine (Free base) 2.000
Myo-Inositol 100.000
Pyridoxine HCI 0.500
Thiamine HCI 0.500
Nicotinic acid (Free acid) 5.000
Folic acid 0.500
Biotin 0.050

Formula weight: 4.16 gms/ltr

QUALITY CONTROL SPECIFICATIONS

: White to light yellow with homogenous mixture of free flowing powder. Appearance of Powder

:Colourless to slight yellow solution, clear, complete. Appearance of prepared medium

 $: 4.8 \pm 0.2$ pH (at 25°C)

INSTRUCTION FOR USE

Dissolve 4.16 gms of dehydrated medium in 600ml of distilled or deionized water at room temperature (15-30°C). 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. Sometimes media does not dissolve completely









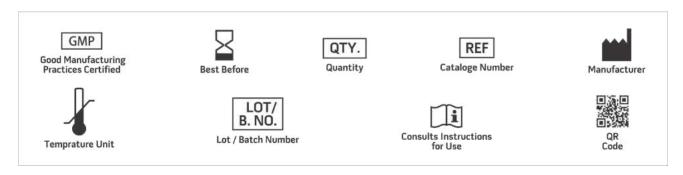


unless the pH is reduced. For these, lower the pH to about 3.0 to facilitate dissolution of media. The pH of medium is adjusted by using 1N HCL/1N NaOH/1N KOH. Make up the final volume to 1000ml with distilled water. Mix gently, heat and rotate between intervals until the solution becomes clear. Do not boil, reheat and allow to cool below 50°C during dispensing. Dispense the medium into suitable containers, plug or cap, then autoclave at 15psi (121°C) 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 45-50°C 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

Dehydrated plant tissue culture media is hygroscopic and should be protected from sunlight and moisture. Store the prepared medium at 2-8°C away from direct light. Medium should be used before the expiry date. The entire volume of each bottle should be used immediately after opening or else the unused portion should be stored in desiccators and refrigerated at 2–8°C.



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

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