B004	YEAST NITROGEN BASE W/O AMINO ACIDS AND AMMONIUM SULPHATE
Formula	
Ingredients :	**gms/lit.**
Biotin	0.000002
Calcium pantothenate	0.0004
Folic acid	0.000002
Inositol	0.002
Niacin	0.0004
p-amino benzoic acid (PABA)	0.0002
Pyridoxine hydrochloride	0.0004
Riboflavin (vitamin B2)	0.0002
Thiamine hydrochloride	0.0004
Boric acid	0.0005
Copper sulphate	0.00004
Potassium iodide	0.0001
Ferric chloride	0.0002
Manganese sulphate	0.0004
Sodium molybdate	0.0002
Zinc sulphate	0.0004
Monopotassium phosphate	1.00
Magnesium sulphate	0.50
Sodium chloride	0.10
Calcium chloride	0.10
Final pH (at 25°C) : 4.5 ± 0.2	

Directions :

A. For Carbon Assimilation tests, prepare the broth base in 10X concentration. Dissolve 1.7 gms. in 100 ml. distilled water. Add 5 gms. ammonium sulphate, 10 mg L-Histidine,20 mg DL-methionine and 20 mg DL-tryptophan. Carbon compounds for assimilation test are added in 10X concentration singly or in combination as required.

B. For Nitrogen Assimilation tests, prepare the medium in 10X concentration. Dissolve 1.7 gms. in 100ml. distilled water. Add 1,0 gms. dextrose, 1 mg L-histidine, 2 mg DL-methionine and 2 mg DL-tryptophan. Add nitrogen compounds for assimilation test in 10X concentration singly or in combination as required. Wickerham employed the following nitrogen sources : ammonbium sulphate 1 gm. potassium nitrate 0.78 gms., urea 0.46 gms. aspargine 1 gm. peptone (gelatin) 1.32 gms.

For A and B, filter sterilize the 10X strength solution, Refrigerate and use as needed. Prepare final medium by aseptically pipetting 0.5 ml. of the 10X sterile medium into 4.5 ml. sterile distilled water. Mix well.

Principle :

Yeast Nitrogen Base without Amino Acids and Ammonium Sulphate is prepared as per Wickerham for classifying the yeasts on the basis of their carbon and nitrogen requirements. Wickerham used following nitrogen sources – ammonium sulphate 1.0 gm /litre, potassium nitrate 0.78 gm/litre, urea 0.46 gm/litre, asparagines 1.0 gm/litre, peptone (gelatin) 1.32 gm/litre.

Yeasts grown on rich medium may carry a reserve of nitrogen in the form of proteins and this may result in erroneous findings. To avoid this, 2 serial transfers in complete medium are recommended.

QC Tests – (I)Dehydrated Medium		
	Colour :	Cream to off white
	Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	4.5 ± 0.2
	Colour (post autoclaving/heating) :	Very light yellow to colourless
	Clarity (post autoclaving/heating) :	Clear

Refer disclaimer Overleaf

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(III)Q.C. Test Microbiological			
	Cultural characteristics observed after 6-7 days at 25 – 30°C.		
	MICROORGANISM (ATCC)	GROWTH (PLAIN)	GROWTH WITH DEXTROSE
	Kloeckera apiculata (9774)	None – poor	Good
	Saccharomyces uvarum (9080)	None – poor	Good
	Saccharomyces cerevisiae (9763)	None – poor	Good

Precautions :	1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
Use :	For classification of yeasts on the basis of their ability of assimilate carbon and nitrogen compounds.
Storage :	Dehydrated medium and prepared medium– Between 2 to 8°C.
Packing :	500 gm. bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B004	1.7 g/l	294.11 L	4.5± 0.2	Nil	FILTRATION