

## Yeast Glucose Chloramphenicol Agar

### DM702

#### Intended use

A selective agar for the enumeration of yeasts and moulds in milk and milk products.

#### Contents

See pack label.

#### Formulation\*

Material:	Concentration in medium:
Yeast Extract	5.0 g/litre
Glucose	20.0 g/litre
Chloramphenicol	0.1 g/litre
Agar	11.0 g/litre
Final pH: 6.6 ± 0.2	

#### Storage and shelf life

All dehydrated culture media containers should be kept tightly closed and stored in a dry place at 10 to 25°C until the expiry date shown on the pack label.

#### Precautions

For *in vitro* diagnostic use only. Observe approved hazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet (available on request or via MAST® website).

#### Materials required but not provided

Standard microbiological supplies and equipment such as loops, MAST® selective supplements, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

#### Procedure

1. Refer to pack label for quantities and volumes required. Prepare MAST® Yeast Glucose Chloramphenicol Agar (DM702D) by suspending the powder in distilled or deionised water. For sachet packs, dissolve the entire contents of the sachet in the volume shown on the label.
2. Autoclave at 121°C (15 p.s.i.) for 15 minutes.
3. Cool to 45 to 50°C and mix well before preparing pour plates with serially diluted samples of milk or other products.
4. Prepare serial 10 fold dilutions of samples of milk or other products using 10g or 10ml of sample in 90ml of the appropriate diluent. (See table below for examples).
5. Pipette 1ml of each dilution into a Petri dish.
6. Pour 10ml of sterile molten agar, cooled to 45 to 50°C, into each dish. Mix thoroughly.
7. Incubate at 23 to 27°C for up to 4 days.

Sample	Choice of diluent
Butter	Peptone/Saline solution
Creams	¼ strength Ringer's
Milk	Peptone solution
Fermented milk	Phosphate buffer solution
Desserts	
Dried milk	
Buttermilk	2% Sodium citrate solution
Cheese	Peptone/Saline solution
Processed cheese	¼ strength Ringer's
	Peptone solution
	Phosphate buffer solution
	2% Sodium citrate solution
	2% Dipotassium hydrogen phosphate solution
Acid casein	2% Dipotassium hydrogen phosphate solution
Acid whey powder	
Caseinate	
Lactic casein	

#### Interpretation of results

After incubation count all colonies (use plates yielding counts of between 10 and 150 colonies) distinguish moulds from yeasts can by colonial morphology. After allowing for dilution factors calculate the number of colony forming units (CFU) of moulds and yeasts per ml of original sample.

#### Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a positive reaction and at least one organism to demonstrate a negative reaction. Do not use the product if the reactions with the control organisms are incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
<i>Escherichia coli</i> ATCC® 10536	No growth
<i>Candida albicans</i> ATCC® 90028	Growth, white colonies
<i>Candida krusei</i> ATCC® 14243	Growth, white-grey colonies

#### References

Bibliography available on request.