



## Dichloran-Glycerol Agar, DG18 |

### AS-1206

For use as a general-purpose medium for counting yeast and molds in food items, as well as for the counting and isolation of *xerophilic* molds in dry and semidried foods.

A selective culture medium called Dichloran Glycerol Agar (DG18) is intended for the counting and isolation of xerophilic molds. The medium's water activity (aw) is decreased to about 0.95 by adding 18% glycerol, which prevents bacterial growth while promoting fungal development. Bacterial contaminations are further suppressed by chloramphenicol. Dichloran prevents mucoraceous fungi from growing excessively, which makes accurate colony counts easier. Peptone and dextrose ensure that nutrients are provided; potassium phosphate buffers the medium and magnesium sulfate provides necessary ions. DG18 is mostly utilized in clinical mycology but is also applied in the microbiological study of semi-dried and dried food products.

#### Composition (gr/L)

Peptone from Casein	5
Glucose	10
Potassium Dihydrogen Phosphate	1
Dichloran	0.002
Magnesium Sulfate	0.5
Chloramphenicol	0.1
Agar	15
Final pH at 25°C	5.6 ± 0.2

#### Preparation

Dissolve 31.6 g of the powder into 1 liter distilled water containing 175 ml of glycerol. Mix well. Autoclave at 121 °C for 15 minutes.

#### Quality Control

Dehydrated Appearance: Homogeneous, free flowing, and beige.

Prepared Appearance: Prepared medium is trace to slightly hazy and beige.

Reaction of 3.16% Solution at 25°C: pH 5.6 ± 0.2

#### Microbial Test Results

Incubate at 22 to 25 °C for up to 5 to 7 days.

Organism (ATCC)	Recovery
<i>Saccharomyces cerevisiae</i> (9763)	Good/Very good
<i>Mucor racemosus</i> (42647)	Fair/ Good
<i>Bacillus subtilis</i> (6633)	None
<i>Escherichia coli</i> (25922)	None

#### Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.