

POTATO DEXTROSE AGAR

POTATO DEXTROSE AGAR (PDA) In Vitro use only To be stored between 2 and 25°C

PRINCIPLE

Potato Dextrose Agar is a general purpose medium for yeasts and fungi that can be supplemented with acid or antibiotics to inhibit bacterial growth.

This medium is recommended for the isolation and the numeration of contaminants in foodstuff.

The high levels of carbohydrates (dextrose and potato extract) favours yeasts and fungi growth whereas the acidity of the medium inhibits the growth of secondary flora.

FORMULA

En grammes par litre d'eau distillée

Infusion from 300grs of potatoes 5,00 Dextrose 20,00 Agar 17,00

Finale pH: 5.6 ± 0.2 at 25° C

PREPARATION

Suspend 42 g of powder in 1 litre of purified water.

Heat slowly to boiling point under constant homogenisation until the medium is completely dissolved.

Autoclave 15 minutes at 121°C.

METHOD

Liquefy the medium and cool to 45-50 °C.

In order to number fungi lower the pH of the medium to 3.5 by adding a 10% sterile solution of tartaric acid. Homogenise well then dispend in appropriate Pétri dishes.

Spread at the surface of the medium 0.1 ml of the tested product, repeat if necessary this step with its decimal dilutions. Incubate at 20-25 °C for 3 to 5 days.

LIMITS AND PRECAUTIONS

Heat the medium after acidification leads to an unwanted lyses of the agar.

BIBLIOGRAPHY

1. . Beever R.E. and Bollard E.G. 1970. The nature of the stimulation of fungal growth by potato extract. J. Gen. Microbiol. **60**:273-279.

PACKAGING

Dehydrated medium

(To be conserved between 1 and 30°C)

AEB152052:500 g

Ready to use medium

AEB622080: Pack of 6 flasks of 200 ml

Ready poured dishes

AEB522079: Pack of 120 dishes (Ø 90 mm).

Made by:

AES CHEMUNEX - Combourg - France

152052£: 03/05/07-D