



TransFast® – detect beverage spoiling microorganisms faster

TransFast® – the fast culture method for the qualitative detection of yeasts, moulds, lactic and acetic acid bacteria in beverages at a pH < 4.5

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TransFast® – detect beverage spoiling microorganisms faster

TransFast® is the fast culture method for the qualitative detection of yeasts, moulds, lactic and acetic acid bacteria in beverages at a pH < 4.5. The TransFast® system is suitable for analysing ready-to-drink beverages, beverage compounds, fruit juice concentrates and rinsing water or membrane filtrate samples.

TransFast® – the System

While classic media are poured into Petri dishes as agar, the carrier system in TransFast® is a transparent gel. The investigation sample, which is usually enriched in advance, is placed with the gel into a transparent tube and incubated. Depending on the germ concentration, first results can be seen after just 24 hours. Furthermore, since the gel lowers the diffusion threshold, the germs will experience an improved supply of nutrients, making them grow and proliferate even faster.

This results in a much more comprehensive detection in a shorter incubation time.

Another innovation is an incubation cupboard with internal lighting. The direct lighting onto the transparent samples allows any possible contamination to be assessed in a fraction of a second. Each beverage spoiling microorganism, whether it be bacteria, yeast or mould, has a unique appearance. There is no need for the time-consuming use of Petri dishes!

TransFast® – the Benefits

The specially developed system reduces both the incubation time and the evaluation time. Used instead of agar, a liquid transparent gel allows beverage spoiling germs to grow quickly by lowering the diffusion threshold.

A. TransFast® – immediate application

TransFast® is available as a ready-to-use medium. The sample can be started straight away. There is no need to fluidise or temper the medium.

B. TransFast® – fast results

It takes about 96 hours to detect yeasts, moulds or bacteria in non-alcoholic beverages. With TransFast® from Doehler, this time can be reduced by at least 24 hours. Contamination can sometimes even be recognised on the first day.

C. TransFast® – immediate evaluation

Thanks to the backlighting, trace contamination in the transparent samples can be identified at a glance. This takes just a fraction of the time which would be needed for evaluation in Petri dishes. A microscopic check can be used to make the result even more certain.

1. TransFast® Broth (pH 6.1) Liquid enrichment medium



- Reduces the risk of false negative results
- Increases safety by also detecting
 - obligate and potential germs
 - slow-growing germs, such as moulds
 - trace contamination, especially in highly viscous products
 - damaged cells
- Increases detection certainty thanks to large sample volume
- Minimises preparation time as ready-to-use
- Saves at least 2 days compared to direct incubation of ready-to-drink beverages

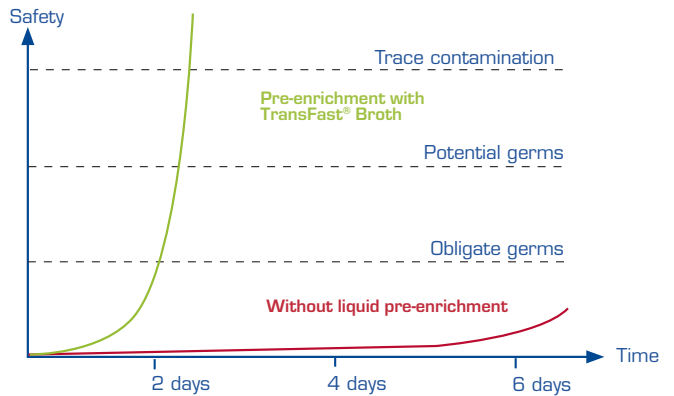
2. TransFast® Gel (pH 4.3) Qualitative detection medium



- Ready-to-use gel replaces time-consuming fluidisation of conventional agar
- Liquid medium ensures optimum diffusion of nutrients and accelerates growth of germs
- Evaluation within seconds thanks to simple screening → transparency allows macroscopic evaluation by backlighting the sample
- First results possible after just 24 hours, final results after 48 hours, with enrichment after around 72 hours
- No need to train specialist staff

TransFast® – the Detection Spectrum

The conventional incubation of a product sample only identifies obligate germs. By enriching a product sample with TransFast® Broth and then transferring it to TransFast® Gel, obligate, potential, slow-growing and damaged cells can be detected.



TransFast® – the Application

| TransFast® – the Application | Process water | Ready-to-drink beverage | | Raw material |
|------------------------------|-----------------------------|-------------------------------|--|--------------------------------------|
| | Rinsing water | Clear products (< 10 % juice) | - Clear products (> 10 % juice) - Cloudy products | Compound Fruit juice concentrate |
| TransFast® Broth | - | - | 200 ml sample + 50 ml TF broth | 30-40 g sample + 80 ml TF broth |
| TransFast® Gel | 20 ml sample + 50 ml TF gel | 5 ml sample + 50 ml TF gel | 1ml sample enriched + 50 ml TF gel | 1 ml sample, enriched + 50 ml TF gel |
| Incubation | 28 °C, 24-48 h | 28 °C, 24-48 h | 28 °C, 24-72 h | 28 °C, 24-72 h |

3. TransFast® Incubation Lightbox



Positive results after 1 day



Lactic acid bacteria



Acetic acid bacteria



Mould



Yeast

- Contamination can be detected at a glance.
- The background lighting makes it easier to evaluate the sample immediately.
- Each group of germs can be recognised macroscopically thanks to its own characteristic cloudiness.
- Constant, effortless monitoring
- Modular structure – up to 4 light boxes can be connected in series

TransFast® Product Portfolio

| Item name | Item number | Package content |
|--------------------------------------|-------------|------------------------------------|
| TransFast® Broth | 2.04727.782 | 9 x 250 ml bottle/box |
| TransFast® Gel | 2.04731.782 | 9 x 250 ml bottle/box |
| TransFast® Tubes (75 ml, sterile) | 2.04730.001 | 100 tubes/bag |
| TransFast® Incubation Lightbox | 4.40000.000 | Size: 135 x 18 x 16 cm (W x H x D) |

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