DÖHLER
NATURAL FOOD & BEVERAGE INGREDIENTS

# TransFast® –

## Fast and safe detection of beverage spoiling microorganisms


DÖHLER · MICROSAFETY DESIGN
DMD®

TransFast® for the qualitative detection of yeasts, moulds, and lactic and acetic acid bacteria up to 48h.

WE BRING IDEAS TO LIFE.

# *TransFast® –*

## *For the fast and safe detection of beverage spoiling microorganisms*

TransFast® is the fast and safe culture method for the qualitative detection of yeast, mould, and lactic and acetic acid bacteria in beverages at a pH < 4.5 in under 48 hours.

**The TransFast® system is suitable for the analysis of**

- ready-to-drink beverages
- beverage compounds
- fruit juice concentrates
- rinsing water samples
- membrane-filtered samples

### *TransFast® – The system*

While classic media are laboriously poured into Petri dishes as agar, the carrier system in TransFast® is a transparent gel. The sample to be investigated, which is usually enriched in advance, is placed with the gel into a transparent tube and incubated. The lower diffusion threshold enables the germs to grow even faster in the liquid gel than on agar plates due to a significantly increased nutrition supply. Depending on the germ concentration, first results can be seen after just 24 hours. This results in much more comprehensive detection at a shorter incubation time.

Another innovation is an incubation cupboard with interior lighting. The direct lighting of the transparent sample allows any possible contamination to be evaluated in seconds. Each beverage spoiling microorganism, whether it be bacteria, yeast or mould, has a unique appearance. The laborious preparation time using Petri dishes is a thing of the past!

### *TransFast® – Advantages for users*

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

- **TransFast® – Immediate application**
  TransFast® is available as a ready-to-use medium. There is no need to melt or temper it first.

- **TransFast® – Fast results**
  Detection of yeasts, mould and bacteria takes just 48 hours, instead of the usual 96 hours. Contamination can sometimes even be recognised within 24 hours.

- **TransFast® – Easy screening**
  Trace contamination can be detected at a glance. This takes just a fraction of the time that would be needed for evaluation in Petri dishes.

- **TransFast® – Increased efficiency**
  The immediate and simple handling of TransFast® supports you in organising your lab work efficiently. This gives you early results so that you can release the goods produced quickly. The positive effects include less storage space required, quicker turnover times and savings for your fixed capital. TransFast® therefore offers you significant financial advantages.

**1. TransFast® Broth [pH 6.1]**
**Liquid enrichment medium**

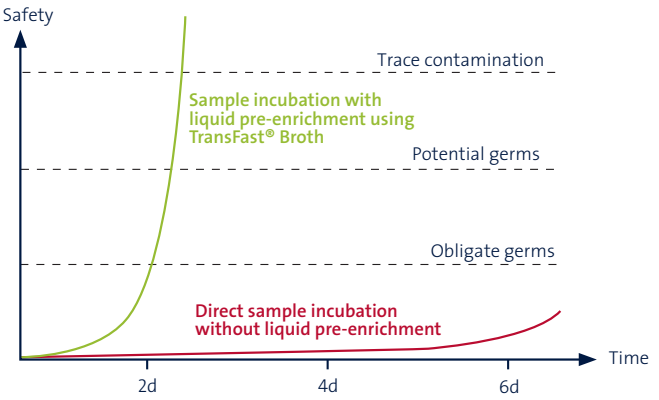
- Reduction of false negative results
- Increased detection reliability thanks to large sample volume
- Reliable detection of trace contaminations
- Reduced preparation time


**2. TransFast® Gel [pH 4.3]**
**Qualitative detection medium**

- No time-consuming melting
- Accelerated growth due to optimum nutrient supply
- No time-consuming training of lab personnel

## TransFast® – Advantages of liquid pre-enrichment

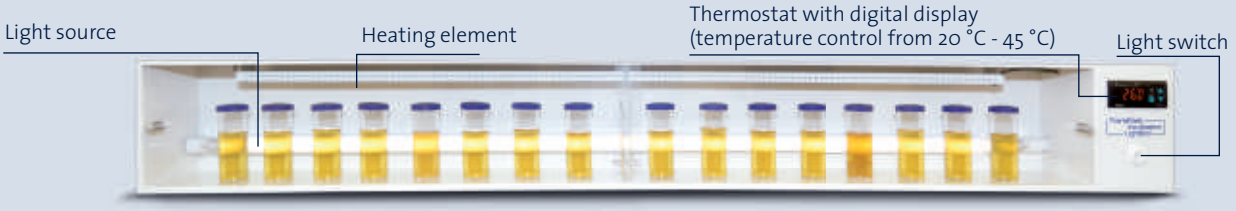
- Initialisation of fast growth
- Increased safety thanks to trace detection of
  - obligate and potential germs
  - slow-growing germs such as moulds
  - damaged cells




## *TransFast® - Method*

| | Water | Beverages | | Beverage raw materials | Membrane filtered samples |
|---|---|---|---|---|---|
| **DMD® culture media** | Rinsing water | Clear beverages < 10% juice | Clear beverages > 10 % juice Cloudy beverages | Beverage compounds Fruit juice concentrates | Membrane filtered samples |
| TransFast® Broth | - | - | 4 + 1 (sample + broth) e.g. 200 ml + 50 ml | 1 + 2 (sample + broth) e.g. 40 ml + 80 ml | - |
| TransFast® Gel | 20 ml sample + 50 ml TF-Gel in TF tube | 5 ml sample + 50 ml TF-Gel in TF tube | 1 ml of enriched sample + 50 ml TF-Gel in TF tube | 1 ml of enriched sample + 50 ml TF-Gel in TF tube | Membrane filter, rolled + 50 ml TF-Gel in TF tube |
| TransFast® Incubation Lightbox | 27-29 °C, < 48 h | 27-29 °C, < 48 h | 27-29 °C, < 72h | 27-29 °C, < 72h | 27-29 °C, < 48 h |

## 3. TransFast® Incubation Lightbox




- Simple screening during incubation
- Constant, effortless monitoring
- Macroscopic germ recognition thanks to specific growth pattern

Positive results after 1 day


Lactic and acetic acid bacteria


Mould


Yeast

# *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) |

# *About Döhler*

Döhler (www.doehler.com) is a global producer, marketer and provider of technology-based natural ingredients, ingredient systems and integrated solutions for the food and beverage industry. Döhler's integrated approach and the broad product portfolio are the optimal basis for innovative and safe food & beverage applications. The product portfolio ranges from flavours, colours, health & nutrition ingredients, cereal ingredients, dairy ingredients, speciality ingredients, fruit & vegetable ingredients to ingredient systems.

Headquartered in Darmstadt/Germany Döhler has 23 production sites, 48 sales offices and application centres as well as sales activities in over 130 countries. More than 3,500 dedicated employees provide our customers with fully integrated food & beverage solutions from concept to realisation.

**"WE BRING IDEAS TO LIFE."** briefly describes Döhler's holistic and strategic approach to innovation. This comprises market intelligence, trend monitoring, the development of innovative products and product applications, advice on food safety and microbiology, food law as well as Sensory & Consumer Science.

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