

PIKA FASTORANGE® YEAST ENRICHMENT BOTTLES

Enrichment bottles for the detection of yeasts and molds

Cat. No. 2038-11

Description	Amount	Storage
Enrichment medium in single use sample bottles for the detection of yeasts and molds.	15 x 40 mL in cell culture flasks	Store dark at room temperature



Warning! Read the manual and the Safety Data Sheets before starting the analysis. Safety Data Sheets are available in the download area from www.pika-weihenstephan.com. All handling steps should be performed under sterile conditions. Wear appropriate protective clothing

For *in vitro* use only.

Product description

PIKA FastOrange® Yeast Enrichment bottles are sterile single use flasks which are pre-filled with an enrichment medium concentrate. They are easy to use and can be applied directly at the sampling point.

PIKA FastOrange® Yeast Bouillon is a culture medium which was developed to detect contaminations by yeasts and molds. Besides turbidity and sediment formation, yeasts often show a clearly visible color change of the culture medium from violet to yellow.

For the specific detection of Dekkera (*Brettanomyces*) yeasts, we recommend FastOrange® BRETT Enrichment bottles (Cat. No. 2037-11).



Detectable microorganisms

Microorganism	Growth conditions
Yeasts	aerobic and anaerobic
Molds	aerobic

Growth of bacteria is suppressed.

Guidelines for use

Depending on the sample type, the following procedures are recommended:

I. Beer, waters and other samples with low sugar content

A. Clear samples (e.g. beer, water, filtered samples)

- For optimal color change, add 40 mL of sample into a bottle and mix. The final concentration of the medium is then 50%. The sample doesn't need to be accurately measured, it is sufficient to pour it and visually check the volume using the scale on the side of the sample bottle.
- Lower broth concentrations than 50% may be used, but will result in a decreased visibility of color change. Below a broth concentration of 30%, color change may not occur, but growth can still be monitored by turbidity and/or sediment formation. Compared to 50% broth concentration, time to visible growth may be prolonged if using lower end concentrations.

B. Turbid samples (e.g. samples with pulp or concentrate)

- For an optimal color change, add 30-40 mL of sample into a bottle and mix.
Important! We strictly do NOT recommend using less than 50% final broth concentration for this sample type, otherwise bacterial growth will not be sufficiently inhibited. Besides, the color change may become hard to detect or not detectable.

When analyzing colored samples or samples with pH value below 4.5, color change may appear direct with the addition of sample. In this case evaluation has to be done by turbidity and/or sediment formation only.

II. Lemonades and fruit containing beverages with higher sugar concentration

- Per bottle, add up to 20 mL of sample and dilute by addition of sterile water to reach the requested sugar concentration.
- Growth of yeasts is detected by turbidity and/or sediment formation. Molds often show a debris, in the beginning often floating on the surface, or build flocks.
- Visual evaluation in this case is done by turbidity, production of sediment or debris, and by color change.

Incubation conditions

Incubate the enriched samples preferably in a horizontal position to increase oxygen supply. Additionally open the lid slightly to allow the release of potentially built gas.

Attention! In case of adding more than 40 ml of sample per enrichment bottle, the bottle would leak during horizontal incubation. Therefore, the bottle has to be incubated upright in this case.

Samples are incubated at $25 \pm 2^\circ\text{C}$ for the following intervals:

Analysis method	Incubation time
PCR	yeasts 2-7 days, molds 3-7 days
Visual evaluation	yeasts 3-10 days molds 3-14 days

Results of visual evaluation

Sample type	Samples are regarded as positive if:
All samples	1. Increasing turbidity and/or sediment formation 2. In case of acid producing microorganisms: color change from violet to yellow

We recommend

1. Microscopic examination and / or PCR analysis to verify the presence of beer spoiling bacteria in positive enrichments.
2. Verification of liquid enrichments can be achieved by second enrichment on pour plates or by streaking out an aliquot on Agar plates
3. We recommend the use of FastOrange® Yeast Agar.

Growth of rare Chloramphenicol resistant bacteria may occur.

General information

Store the product in the dark at room temperature (max. 25°C). Cooling below 25°C is NOT necessary. Due to manufacturing, slightly differences in color of culture medium may occur in bottles. This is NOT influencing product quality.

Best before date for unopened product is given on the outer label. After opening, we cannot guarantee for shelf life.

The product is not suitable for human or animal consumption. It must not be used for the direct propagation of microorganisms which later are used for food production or might get into contact with food.

FastOrange® Yeast Products

Yeast Bouillon	(12 x 240 mL)	2038-1
Yeast Agar	(12 x 170 mL)	2038-2
Yeast Hygiene Tests	(48 x 5 mL with 48 swabs)	2038-3
Yeast Tubes	(48 x 5 mL)	2038-10
Yeast Enrichment Bottles	(15 x 40 mL)	2038-11



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Notes: The relevant antibiotics/fungicides contained in the medium fall short of critical values that require monitoring or declaration according to regulation (EG) 1907/2006 (REACH). When properly applied, the medium may be disposed of through the normal sewage system. It is strongly recommended to inactivate the live microorganisms in any enriched sample by heating to $121^\circ\text{C}/250^\circ\text{F}$ for 20 min (autoclave) to exclude a release of live microorganisms. Although this information was collected thoroughly, we cannot guarantee that any of the content is incomplete or incorrect. We do not take over any warranty for consequences which are resulting from improper handling or incorrect use of this product. Additionally, always comply with the applicable laws, regulations and directives of your country. PIKA Weihenstephan® and FastOrange® are trademarks registered in Germany and other countries.