Wild Yeast Copper Additive <1%
for Wild Yeast Detection with FastOrange® Yeast Enrichment Bottles 40 mL
SKU #2050-2038-11

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.99% Copper Sulphate Stock Solution, sterile</td>
<td>15 x 4 mL</td>
<td>Store at ambient temperature</td>
</tr>
</tbody>
</table>

⚠️ **Warning!** Read the manual and the Safety Data Sheets before starting the analysis. Safety Data Sheets are online available at [www.pika-weihenstephan.com](http://www.pika-weihenstephan.com). All handling steps should be performed under sterile conditions. Wear appropriate protective clothing. For in vitro use only.

**Product description**
Wild Yeast Copper Additive <1% is a chemical supplement which allows the detection of *Saccharomyces cerevisiae* var. *diastaticus* and other Wild Yeasts. The principle of its selectivity is based on the EBC method 4.2.5.1 *Saccharomyces Wild Yeasts, Cu-differentiation* which describes the use of nutrient media supplemented with copper sulphate to inhibit growth of brewer’s yeast.

PIKA FastOrange® Yeast Enrichment bottles are sterile single use flasks which are prefilled with enrichment medium concentrate, ref. to SKU #2038-11.

The combination of PIKA FastOrange® Yeast Enrichment bottles and Wild Yeast Copper Additive <1% is optimized to quickly grow Wild Yeasts, while suppressing growth of most brewing yeasts.

**Guidelines for use**

**A. Preparation of Enrichment Bottle**
1. One vial of Wild Yeast Copper Additive <1% is needed per Yeast Enrichment bottle.
2. Add one whole vial of Wild Yeast Copper Additive <1% into a FastOrange® Yeast Enrichment bottle and mix well.

**Important!** For *Saccharomyces cerevisiae* var. *diastaticus* analysis, a serial enrichment is necessary. You need to prepare two Yeast Enrichment bottles for each sample you want to test.

**B. Enrichment of Samples**
1. Add 30-40 mL of sample into the first of two prepared bottles (as per A.) and mix. The final concentration of the medium will be ≥ 50%. The sample volume does NOT 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.
2. First enrichment: Incubate at 25 ± 2 °C for 1 day
3. For serial enrichment, transfer half of the enriched sample (from 2. above) into the second of the two prepared bottles (as per A.) and mix.
4. Second enrichment: incubate bottle from 3. above at 25 ± 2 °C for 1 day

**Incubation conditions**
Incubate the enriched sample in a horizontal position to increase oxygen supply. Do not fully tighten the lid to allow gas exchange.

**Attention!** Do not overfill! Adding more than 40 mL of sample per enrichment bottle may cause the bottle to leak during horizontal incubation.

**Detectable microorganisms**

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Growth conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Saccharomyces cerevisiae</em> var. <em>diastaticus</em> and <em>Brettanomyces</em></td>
<td>aerobic or anaerobic</td>
</tr>
<tr>
<td>Other Wild Yeasts</td>
<td>aerobic or anaerobic</td>
</tr>
</tbody>
</table>

Growth of typical *Saccharomyces cerevisiae* brewing yeasts and of bacteria* is suppressed.
We recommend

1. Verify the presence of Wild Yeasts using PCR analysis. Refer to the list at the end of the manual for available PCR Detection Kits for yeast detection and/or identification.

2. Verification of liquid enrichments can be achieved by further enrichment on pour plates or by streaking out an aliquot on agar plates. We recommend the use of FastOrange® Wild Yeast Agar.

3. For growing colonies** on the Wild Yeast Agar plate we recommend a microscopic examination.

* Growth of rare chloramphenicol resistant bacteria may appear.

** In our study of more than 200 brewing yeast isolates we observed that in rare cases colonies may form, particularly with some English Ale yeasts.

General information

Store the product at room temperature (max. 25°C). Cold storage below 25°C is NOT necessary.

Best before date for unopened products are given on the outer label. After opening we cannot guarantee the shelf life. The product is not suitable for human or animal consumption. It must not be used for the direct propagation of yeasts which are later used for food production or might get into contact with food.

FastOrange® Wild Yeast Products

Wild Yeast Agar (12 x 170 mL) SKU 2039-2
Wild Yeast Copper Additive <1% (15 x 4 mL) SKU2050-2038-11
Wild Yeast Copper Additive <5% (12 x 4.8 mL) SKU2050-2038-1

> more Wild Yeast broth products will be soon available!

FastOrange® Yeast Products for preparation

Yeast Enrichment Bottles (15 x 40 mL) SKU 2038-11
Yeast Bouillon (12 x 240 mL) SKU 2038-1

4e® For everyone Detection Kits

Superattenuator Yeasts Screening SKU 2402-58
S. c. var. diastaticus Screening SKU 2402-49
Dekkera (Brettanomyces) sp. Screening SKU 2402-20
Dekkera (Brettanomyces) bruxellensis SKU 2402-54
Dekkera (Brettanomyces) anomala SKU 2402-55
Dekkera (Brettanomyces) naardenensis SKU 2402-56

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°C/250°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.

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