



Brettanomyces Selective Medium

Microbial monitoring for the presence of Brettanomyces species in wine

- ▶ Formulated for the selective growth of *Brettanomyces* species
- ▶ No media preparation or cleanup
- ▶ Convenient with Millipore ready-to-use filtration devices

Brettanomyces (or Dekkera, an altered state of *Brettanomyces*) yeasts, including *B. bruxellensis*, *B. lambicus*, *B. anomalus*, *B. custersianus*, *B. naardenensis*, *B. intermedius* and *B. nanus*, are primarily known as wine and beer spoilage organisms. However, in some cases, *Brettanomyces* may play a positive role in a red wine's flavor and bouquet and be an integral part of its character. In either case, the level of *Brettanomyces* must be monitored and managed.

Generally believed to occur in the cellar rather than in the vineyard, *Brettanomyces* can be monitored and found at all stages during the wine making process, including racking, blending, aging or bottling. These yeasts typically grow in low cell numbers during wine aging in barrels and are said to peak at around six months of aging. If *Brettanomyces* is detected before the wine is spoiled, techniques such as exposure to limited SO₂ or filtration may be used to kill or remove the *Brettanomyces*. If it is detected too late and in high concentrations, the spoiled wine is generally lost and discarded.

Microbial Management

Microbial management consists of two parts:

- Monitoring the microorganism populations at the beginning of a process, during that process, and in the finished product up to the point of consumption.
- Removing undesirable populations of *Brettanomyces* by utilizing membrane filtration, such as Millipore's Vitipore® cartridges.

The key to the prevention of harmful contamination is to monitor the process for early detection.

Brettanomyces Testing

Barrels (Prior to Filling)

Rinse with clean water (Non-Ozonated), collect the rinse water, and test by filtering under vacuum with Microfil® 250 filtration device or MicropreSure® In-Line Filtration monitors using a sterile tube on the inlet.

Non-exposed Surfaces (Such As Equipment)

Collect last clean-in-place (CIP) rinse water and test by using a MicropreSure monitor.

Wine (Prior to Blending)

Sample 100 mL by the membrane filtration method using Microfil funnels and EZ-Pak® membranes.

Device Options with Brettanomyces Medium

A Single Multipurpose Filtration System for Most Applications — the Microfil System

The Microfil system provides a simple, low-cost and reliable way to routinely test for microbiological contamination. The ready-to-use disposable funnels, together with the EZ-Pak filter dispenser, eliminate time consuming steps and make equipment handling easy. A single, unique filtration system can be used for the following:

- Detection of unwanted yeast and bacteria in wine
- Checking empty bottles
- Checking corks
- Checking equipment and barrels
- Evaluating cleaning steps

On-line Sampling for Microbiological Analyses—MicropreSure Monitors

MicropreSure monitors allow water and product samples to be aseptically collected and filtered right at the collection site. Designed for use with pressurized process lines or reservoir sampling, the MicropreSure monitor handles pressures up to 3 bar. This device requires the use of sanitary sampling valves that have a male Luer

connector, installed at critical points of the equipment where it is desirable to perform wine sample collections for analysis. For existing sampling valves that do not have a Luer connection, Millipore offers an extensive range of inexpensive and easy-to-install adapters.

By reducing the sampling process to a few simple steps within a closed system, the MicropreSure In-Line Filtration monitor improves in-process microbiological testing for beverage producers. Trend monitoring can be accomplished simply and reliably by using MicropreSure monitors to sample product before and after the last filtration step.

Convenient, Unbreakable Plastic Ampoules

The *Brettanomyces* medium is available in easy-to-use plastic ampoules. The ampoules eliminate waste and spoilage because each contains enough medium for one test. Simply twist the cap and expel the medium into a MicropreSure monitor or an air-tight Petri dish with a pad, and incubate at 25 °C for a minimum of 5 days. Colonies appear white and creamy and appear "boat shaped" when viewed under a microscope.

Specifications

Brettanomyces Medium

Medium Color: Yellow/orange

pH at 25 °C: 3.5

Recommended Incubation Time and Temperature:

5 – 7 days at 25 °C
Colonies appear small, white and creamy.

Storage and Shelf-life:

Refrigerate at 2 – 10 °C for up to 6 months from date of manufacture.

QC Organisms:

Dekkera naardenensis ATCC® 22075 (previously *Brettanomyces naardenensis*) as a positive control

Zygosaccharomyces baillii ATCC 60453 and *Pseudomonas aeruginosa* ATCC 9121 as negative controls

Ordering Information

Description	Qty/Pk	Catalogue No.
<i>Brettanomyces</i> Selective Medium, plastic ampoules, 2 mL	50	SC1M 339 H3
MicropreSure Monitor, sterilized, 0.45 µm, membrane, white gridded	48	MSHA WGM 48
Microfil Filter Device, 0.45 µm, 250 mL funnel		
white gridded	90	MIHA WG0 90
black gridded	90	MIHA BG0 90
Petri dish with pad	100	PD10 047 50
EZ-Pak® membranes, 0.45 µm, 47 mm, white gridded	4 x 150	EZHA WG4 74

To Place an Order or Receive Technical Assistance

For additional information call your nearest Millipore office:

In the U.S. and Canada, call toll-free 1-800-MILLIPORE (1-800-645-5476)

In the U.S., Canada and Puerto Rico, fax orders to 1-800-MILLIFX (1-800-645-5439)

Outside of North America contact your local office.

To find the office nearest you visit www.millipore.com/offices.

Internet: www.millipore.com

Technical Service: www.millipore.com/techservice

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