Data Sheet

Brettanomyces Selective Medium

Microbial monitoring for the presence of Brettanomyces *species in wine*

Brettanomyces (or Dekkera, an altered state of *Brettanomyces*) yeasts, including *B. bruxellensis, B. lambicus, B. anomalus, B. custersianus, B. naardenensis, B. intermidius* 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 mem- brane 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	**Ordering Information**		
Brettanomyces Medium	**Description**	**Qty/Pk**	**Catalogue No.**
Medium Color: Yellow/orange	*Brettanomyces* Selective Medium, plastic ampoules, 2 mL	50	SC1M 339 H3
pH at 25 °C: 3.5	MicropreSure Monitor, sterilized, 0.45 µm, membrane, white gridded	48	MSHA WGM 48
Recommended Incubation Time and Temperature: 5 – 7 days at 25 °C Colonies appear small, white and creamy.	Microfil Filter Device, 0.45 µm, 250 mL funnel *White gridded* *Black gridded*	90	 MIHA WG0 90 MIHA BG0 90
Storage and Shelf-life: Refrigerate at 2 – 10 °C for up to 6 months from date of manufacture.	Petri dish with pad	100	PD10 047 50
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	EZ-Pak® membranes, 0.45 µm, 47 mm, white gridded	4*150	EZHA WG4 74