Technical Data Sheet

Brettanomyces Selective (BSM) Broth – 2mL Liquid Media Ampoules
Cat. No. MHA00BSM2

This medium is recommended for detection of Brettanomyces contamination in wine and beer. Bacteria and other yeasts are inhibited.

Mode of Action
Brettanomyces Selective Broth is used for the detection of Brettanomyces contamination (spoilage organisms) in wine and beer. Dextrose is the fermentable carbohydrate providing carbon and energy. Peptone and malt extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly the B-group. Thiamine is a growth factor. Selective agents are added to improve Brettanomyces recovery through the inhibition of common contaminants as Saccharomyces cerevisiae. Bacteria and other yeasts are inhibited. Colonies appear small, white and creamy. A halo can appear around the colony due to acid production.

Typical Composition (per liter of purified water)

Malt Extract	3.0 g	Cycloheximide	0.1 g
Yeast Extract	3.0 g	Gentamycin	0.05 g
Peptone	5.0 g	Chlorotetracycline	0.125 g
Dextrose	10.0 g		
Chloramphenicol	0.1 g		
Thiamine	0.01 g		

Application
1. Collect the sample in a sterile container. The sample should be a 100 ml minimum.
2. Invert one BSM Broth ampoule 2 to 3 times. Open the ampoule. Remove the lid of a petri dish and carefully pour the contents equally onto the absorbent pad.
3. Set up the membrane filtration apparatus. Use sterile forceps to put the membrane filter in the assembly. The grid side is up.
4. Invert the sample / diluted sample for approximately 30 seconds to thoroughly mix the sample.
5. Pour the sample / diluted sample into the funnel. If the volume is less than 20ml, add 10 ml of sterile buffered dilution water to the funnel.
6. Apply the vacuum until the funnel is empty. Then stop the vacuum.
7. Rinse the funnel with 20ml to 30ml of sterile buffered dilution water. Apply the vacuum. Rinse the funnel two more times.
8. Stop the vacuum when the funnel is empty. Remove the funnel from the assembly. Use sterile forceps to lift the membrane filter.
9. Put the membrane filter on the absorbent pad. Let the membrane filter bend and fall equally across the absorbent pad to make sure that the air bubbles are not trapped below the filter.
10. Secure the lid on the petri dish and invert the dish.
11. Incubate the inverted petri dish for 5-7 days at 28-32° C.
12. Remove the petri dish from the incubator. Use a microscope to count the number of bacteria colonies on the membrane filter.
13. Interpret and report the results.

Results Reporting
Report the colony density as the number of colonies in 100ml of sample. If there's more than 200 colonies, dilute the sample and use the diluted sample in the test procedure.

Colonies in 100ml = Colonies counted / ml of sample x 100**.**

Storage and Shelf Life
The product can be used until the expiry date if the unopened ampoules are stored sealed in the aluminum foil bag at 2 – 10°C.

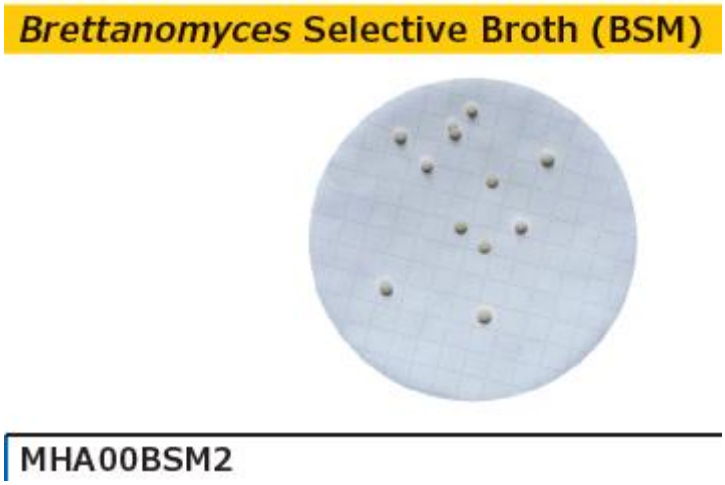
Disposal
Please dispose of used culture medium in accordance with local regulations (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Function	Control Strains	Incubation	Reference Medium	Method of Control	Expected Results
Productivity	*Dekkera (Brettanomyces) naardenesis* ATCC® 22075	5-7 days at 28-32° C	Previously validated batch of BSM Broth	Quantitative	Recovery 85-115% Characteristic colonies
Selectivity	*Pseudomanas aeruginosa* ATCC® 27853 WDCM 00025 *Zygosaccharomyces bailii* ATCC® 58445			Qualitative	Recovery inhibited

Please refer to the actual batch specific certificate of analysis.

Colonies appear small, white and creamy.



Ordering Information

Product	Cat. No.	Pack size
Brettanomyces Selective (BSM) Broth	MHA00BSM2	50 x 2 mL plastic ampoules

Literature

Compendium of methods for the microbiological examination of foods. American Public Health Association. (2001)

Lit. No. MK_PF9424EN