soleris®

Direct Yeast and Mold Vial

Product No. DYM-109C

Instructions for use in BioLumix Instrument

Soleris® vial uninoculated (left) and inoculated vial (right).

The Direct Yeast and Mold (DYM-109C) Vial (9 mL) allows for a rapid detection of yeast and mold in a variety of nutraceutical and personal care/cosmetic products. The vial has broad inclusivity and an assay time of 48 hours for most applications. As yeast and molds grow in the broth medium, the carbon dioxide (CO_2) produced diffuses through a membrane layer into a soft agar plug containing a dye indicator. The color change in the dye is read by the BioLumix® instrument. The membrane layer also serves as a barrier, eliminating product interference with the reading frame.

Materials Required:

1. Direct Yeast and Mold vial (DYM-109C)
2. Yeast and Mold Supplement (YI-110C)
3. Sterile water

Dependent on Sample Tested:

1. Sterile 1 N to 5 N sodium hydroxide (NaOH) and/or hydrochloric acid (HCl)
2. pH meter or pH paper
3. Butterfield's Phosphate Buffer, 99 mL (BPB-99)
4. For USP Testing: Tryptic Soy broth, 90 mL (BLX-TSB90) or Butterfield's Phosphate Buffer, 90 mL (6654)
   a. For all other testing, use designated neutralization broth, such as D/E Neutralizer, TAT Broth, Modified Letheen Broth, etc.

Vial Specifications

1. Vial pH is 5.6 ± 0.2
2. Vial sample capacity: 0.1 – 1.0 mL

Yeast and Mold Supplement Preparation

1. Add 10 mL of sterile deionized water, mix well. Store in the refrigerator up to 7 days after rehydration. For more information, please see the YI-110C product insert.

Vial Preparation

1. Remove DYM-109C vials from the refrigerator and allow to equilibrate to room temperature.
2. Add supplement to the DYM-109C
   a. Sample without starter culture: Add 0.15 mL of YI-110C directly to the DYM-109C vial, mix well. Add sample to vial within 2 hours after the addition of supplement. Refer to insert.
   b. Sample with starter culture: Add 0.6 mL of YI-110C directly to the DYM-109C vial, mix well. Add sample to vial within 2 hours after the addition of supplement. Refer to insert.

Sample Preparation

1. For USP testing, perform 1:10 dilution by adding 10 g of sample in 90 mL of Tryptic Soy Broth (See Neogen Rapid Microbiology System Validation Book, Introduction, p.5) or designated neutralization broth.
   a. Check pH and adjust, if necessary, to 7.0 ± 1.0.
2. If using the dilute-to-specification method, complete the dilution required.

Inoculation of Vial

1. Inoculate the vial with no more than 1.0 mL and no less than 0.10 mL of the sample to be tested. If using dilute-to-specification method, add the volume of the appropriate dilution required.
2. Cap the vial and gently invert 3 times to mix sample. Keep cap tight.
3. Insert the vial into the BioLumix instrument set at 28°C or as indicated by trainer. The test algorithm can be optimized if required. It is not recommended to adjust parameters without consulting Neogen Technical Services.

Algorithm Utilized:

Test	Test Type	Detection Level	Resolution	Ignore	Test Duration	Temp
DYM-109C	Yellow	7	3	30	48–72 hours	28°C

CAUTION: Products containing CO_2-releasing compounds (e.g., ascorbic acid, calcium carbonate, or calcium ascorbate) need to be carefully validated, as reactions with the vial chemistry may occur, causing unconfirmed positive results.

Disclaimers:

Information provided is based on validation procedures that Neogen performed in Neogen laboratories. Deviation from procedures is possible, but should be discussed with Neogen Technical Services.

Appearance of the vials should be inspected prior to use.

Certain product matrices may require new parameters. For more information, contact Neogen Technical Services.

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