



ActeroTM Demi Fraser (with Ferric Ammonium Citrate) Product Information

Catalogue No.	Description
FCM-256	Actero TM Demi Fraser (5L) – EZ-Media Dry Bag – two port
FCM-258	Actero TM Demi Fraser (20L) – EZ-Media Dry Bag – two port

INTENDED USE :

A modification of Fraser Broth Base, this media was developed by Fraser and Sperber for the rapid detection of *Listeria* from food and environmental samples. The incorporation of ferric ammonium citrate allows for the selective enrichment of *Listeria spp.*

Formula* per Liter:

Casein Digest Peptone	5.0g
Meat Peptone	5.0g
Beef Extract	5.0g
Yeast Extract.....	5.0g
Nalidixic Acid.....	0.010g
Esculin	1.0g
Monopotassium Phosphate	1.35g
Sodium Chloride	20.0g
Disodium Phosphate.....	9.6g
Ferric Ammonium Citrate.....	0.5g
Acriflavin.....	0.012g
Lithium Chloride.....	3.0g

Final pH: 7.2 ± 0.2 at 25°C

PREPARATION:

Materials not provided: The required ancillary tubing and connectors can be purchased separately.

Instructions: Observe aseptic techniques from media preparation through to dispensing. Remove the ActeroTM EZ-Media Dry Bag from its packaging, unfold and lay it flat on the bench with tubing and caps facing up. There are two tubes on the ActeroTM EZ-Media Dry Bag with red caps. The “in” port does not have a connector and the “out” port has a male connector to ensure sterility while the media is being prepared and later dispensed.

Aseptically remove the sterile filter from its separate bag. The filter has 2 male ends and there is an arrow on the filter to indicate the “in” and “out”. Connect the “in” end of the filter nozzle to the pump or dilutor tubing (used for adding the deionized water to the ActeroTM EZ-Media Dry Bag). We recommend securing this connection with a tie wrap or zip tie (not provided).

Next, remove the sterile cap from the “in” tube (without connector) attached to the ActeroTM EZ-Media Dry Bag and connect it to the other end of the filter nozzle to permit the flow of deionized water into your tubing. Loosen the vent valve on the filter and slowly begin to fill the filter capsule with the deionized water so that the liquid reaches the level of the vent. As soon as all excess air escapes the capsule and the deionized water reaches the level of the vent, tighten the vent value to close it. Then, gradually increase the flow rate or pressure of the pump or dilutor to the desired value (maximum flow rate: 350mL/min/0.1bar; maximum operating pressure: 4.1 bar).

Turn off your pump or dilutor when the corresponding volume of water (20L or 5L) has been added to the ActeroTM EZ-Media Dry Bag. Remove the ActeroTM EZ-Media Dry Bag tube from the filter nozzle and replace the cap on the tube end. Gently massage the ActeroTM EZ-Media Dry Bag until the media is completely dissolved. The prepared media in the ActeroTM EZ-Media Dry Bag can be stored up to 7 days at room temperature on the bench.

The supplied filter is intended to be used only once or, if necessary, when rehydrating several bags within a short amount of time, as long as the manipulation is done aseptically. Otherwise, disconnect the filter from the pump or dilutor tubing and allocate the filter for biohazard waste disposal according to local, municipal, provincial, state and/or federal regulations.

When ready to use the prepared media, remove the cap from the “out” tube (with connector) on the ActeroTM EZ-Media Dry Bag, aseptically connect it to your dispensing pump and dispense the appropriate volume into your sample bags. You can directly connect the dispensing pump tubing to the connector or use the female adapter available at FoodChek Systems Inc available under catalog number FCLM-028.

To enrich *Listeria spp.* from a food sample, food ingredient or environmental swab, consult FDA:BAM, Health Canada Compendium of Methods or any other appropriate reference.





QUALITY CONTROL SPECIFICATIONS:

1. The powder is homogeneous, free flowing, and beige.
2. Visually, the prepared medium is light to medium amber and with no to slight precipitate.

Function	Control strains	Incubation	Method of control	Criteria	Expected results
Productivity	<i>Listeria monocytogenes</i> 4b ATCC 13932 + <i>Escherichia coli</i> ATCC 25922 + <i>Enterococcus faecalis</i> ATCC 19433	24 ± 2 h / 30 ± 1 °C	Qualitative	> 10 colonies on Agar <i>Listeria</i> according to Ottaviani and Agosti	Blue green colonies with opaque halo
	<i>Listeria monocytogenes</i> 1/2a ATCC 35152 + <i>Escherichia coli</i> ATCC 25922 + <i>Enterococcus faecalis</i> ATCC 19433				
Selectivity	<i>Escherichia coli</i> ATCC 25922		Qualitative	Total inhibition (0) on TSA	-
	<i>Enterococcus faecalis</i> ATCC 19433	Qualitative	< 100 colonies on TSA	-	

The performance test is in accordance with the current version of ISO 11133.

