



## Charm MRL Beta-lactam and Tetracycline 2-Minute Test (Advanced Sensitivity) for Milk

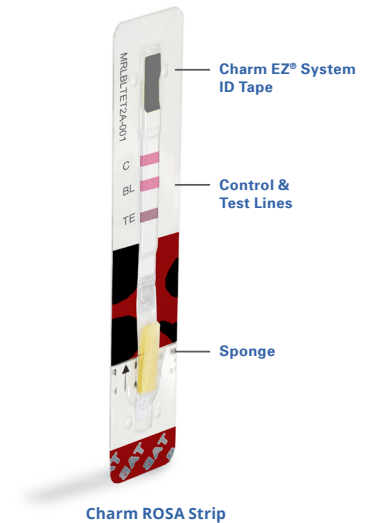
### Product Overview

Charm® ROSA® (Rapid One Step Assay) technology is trusted by the dairy industry worldwide for fast and accurate milk residue screening.

The Charm MRL Beta-lactam and Tetracycline 2-Minute Test (Advanced Sensitivity) (MRLBLTET2A) detects two families of antibiotic drugs at or below EU/CODEX Maximum Residue Limits (MRL) in cow, sheep, and goat milk.

### Benefits of MRLBLTET2A Test Include:

- Achieves results in 2 minutes for cow milk
- Achieves results in 3 minutes for goat and sheep milk
- Detects 13 beta-lactam and 3 tetracycline drugs
- Meets EU/CODEX MRL
- Validated by ILVO - Institute of Agricultural and Fisheries Research (ILVO), Belgium



### Simple Procedure with the Charm EZ System



**1** Add Sample



**2** Incubate



**3** Read Results in Less Than 5 Seconds



**For Batch Processing**

Incubate multiple strips simultaneously, then read results in the Charm EZ system.

## Sensitivity in Milk

Detection Ranges in Cow Milk at 0 to 7 °C					
Beta-lactam Drug	Detection Range (ppb*)	EU/CODEX MRL (ppb*)	Tetracycline Drug	Detection Range (ppb*)	EU/CODEX MRL (ppb*)
Amoxicillin	2 to 3 ppb	4 ppb	Chlortetracycline	50 to 100 ppb	100/100 ppb
Ampicillin	2 to 3 ppb	4 ppb	Oxytetracycline	50 to 100 ppb	100/100 ppb
Cefacetrile	20 to 40 ppb	125 ppb	Tetracycline	10 to 30 ppb	100/100 ppb
Cefalonium	1 to 3 ppb	20 ppb	^ Ceftiofur parent drug sensitivity is approximately 1/2 that reported in the table § U.S. tolerance is 20 ppb cephalapirin † Positive at least 95% of the time * parts per billion, µg/kg or µg/L		
Cefazolin	20 to 40 ppb	50 ppb			
Cefoperazone	1 to 3 ppb	50 ppb			
Cefquinome	15 to 25 ppb	20 ppb			
Ceftiofur and Metabolites <sup>^</sup>	40 to 70 ppb	100/100 ppb			
Cephapirin	4 to 6 ppb	60 <sup>§</sup> ppb			
Cloxacillin	3 to 6 ppb	30 ppb			
Dicloxacillin	3 to 5 ppb	30 ppb			
Oxacillin	6 to 8 ppb	30 ppb			
Penicillin G	0.75 to 1.5 ppb	4/4 ppb			

## Ordering Information

Order Codes	Each Kit Includes
LF-MRLBLTET2A-40NSK	Test Strips
LF-MRLBLTET2A-100K	Test Strips and Positive Controls

See Operator's Manual for additional kits and order codes.