



# Charm ROSA Tetracycline-SL (Dilution Confirmation) Test 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 ROSA Tetracycline-SL (Dilution Confirmation) Test (TET-SL) detects all three tetracycline drug residues in raw commingled milk at or below the EU/CODEX and Canadian Maximum Residue Limits (MRL) and is confirmed with a dilution step to meet US Tolerance Levels. The TET-SL test, with orange strips, is approved for the NCIMS Tetracycline Pilot Program.

# Benefits of TET-SL Test Include:

- Achieves results in 8 minutes
- Detects tetracycline, chlortetracycline, and oxytetracycline drugs
- Used on all Charm ROSA equipment compatible with beta-lactam testing: ROSA-M Reader, ROSA Pearl-X Reader, and Charm EZ System
- Incubates at 56 ± 1 °C
- Detects tetracyclines at levels less than 100 ppb, but is confirmed with a dilution step to meet US tolerance 300 ppb
- Approved for the NCIMS Tetracycline Pilot Program



# Simple Procedure with the Charm EZ System







Read Results in Less Than 5 Seconds



**For Batch Processing** 

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



**Add Sample** 

### Sensitivity in Milk

TABLE 1. UNDILUTED Sensitivity\* - Detection Ranges in Cow Milk at 0 to 7 °C

Concentration-Response Information - Displayed as % Positive of n=30 tests

Concentration (ppb, parts per billion, µg/kg or µg/L)	Chlortetracycline <sup>s</sup>	Oxytetracycline§	Tetracycline <sup>§†</sup>
15			30
25	0	3	97
30			100
50	37	63	100
75	97	97	
100	100	100	100
300	100	100	100
EU/CODEX MRL and Canadian AMRL (µg/kg or µg/L)	100	100	100
US Tolerance (ppb)	300	300	300
Calculated 90/95 % Detection Level (ppb)	96	94	46

<sup>§ 90 %</sup> positive with 95 % confidence detection level which is at least 25 % less than the US Tolerance

### TABLE 2. DILUTED Sensitivity\* - Detection Ranges in Incurred Cow Milk at 0 to 7 °C

Concentration-Response Information - Displayed as % Positive of n=30 tests

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Concentration (ppb, parts per billion, µg/kg or µg/L)	Chlortetracycline^	Oxytetracycline <sup>§</sup>	Tetracycline <sup>§†</sup>	
20			0	
40			10	
60	3	3	70	
80			100	
120	27	37		
180	23	37		
240	93	90		
290	300			
300	100	100	100	
US Tolerance (ppb)	300	300	300	
Calculated 90/95 % Detection Level (ppb)	292	243	74	

<sup>^</sup>Demonstrated a 90/95 % sensitivity which is at least 25 % less than the US Tolerance.

# **Ordering Information**

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

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





<sup>† 25 %</sup> less than MRL/AMRL

<sup>\*</sup> Nothing stated herein, including detection level information, shall be understood to imply any warranty or guaranty

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