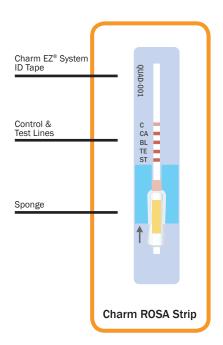
Charm QUAD Test

for Milk



Product Overview





Charm® Rapid One Step Assay (ROSA®) technology is trusted by the dairy industry worldwide for fast and accurate milk residue screening. The **Charm QUAD® Test** (**QUAD**) detects chloramphenicol, beta-lactam, tetracycline, and streptomycin drugs in raw commingled milk meeting the Russian Technical Regulation of the Customs Union. The QUAD test may also be used to test at or below EU/CODEX Maximum Residue Limit (MRL) and EU Minimum Required Performance Limit (MRPL).

Benefits of QUAD Test Include:

- Achieves results in 5 minutes
- Detects chloramphenicol, beta-lactam, tetracycline, and streptomycin drugs
- Incubates at 40 ± 1 °C
- Meets Russian Technical Regulation of the Customs Union
- Meets EU/CODEX MRL and EU MRPL
- Validated by ILVO Institute for Agricultural and Fisheries Research (ILVO), Belgium

Simple Procedure





For batch processing, incubate multiple strips simultaneously, then read results in the Charm EZ system.





Sensitivity in Milk

Beta-lactam Drug	Detection Range ^A (ppb ^B)	EU/CODEX MRL (ppb ^B)	Tetracycline Drug	Detection Range ^A (ppb ^B)	Russian Technical Regulation ^D (ppb ^B)
Amoxicillin	3 to 5	4	Chlortetracycline	4 to 6	10
Ampicillin	3 to 4	4	Doxycycline	6 to 10	10
Cefacetrile	20 to 40	125	Oxytetracycline	4 to 6	10
Cefalonium	8 to 12	20	Tetracycline	3 to 6	10
Cefazolin	20 to 40	50	Amphenicol Drug	Detection Range ^A (ppb ^B)	EU MRPL ^E and Russian Technical Regulation (ppb ^B)
Cefoperazone	1 to 3	50	Chloramphenicol	0.2 to 0.3	0.3
Cefquinome	10 to 20	20			
Ceftiofur and Metabolites ^c	30 to 40	100 / 100	Aminoglycoside Drug	Detection Range ^A (ppb ^B)	EU/CODEX MRL and
Cephapirin	20 to 35	60			Regulation ^D (ppb ^B)
Cloxacillin	20 to 30	30	Dihydrostreptomycin	75 to 150	200 / 200
Dicloxacillin	20 to 30	30			
Penicillin G	2 to 3	4/4	Streptomycin	75 to 150	200 / 200

A Positive at least 95% of the time.

Ordering Info _____

Order Codes	Each Kit Includes
LF-QUAD-RUS-20K LF-QUAD-RUS-100K	Test Strips and Positive Controls

See Operator's Manual for additional kits and order codes



B parts per billion, μg/kg or μg/L

^c Ceftiofur parent drug sensitivity is approximately 1/2 that reported in the table.

 $^{^{\}text{D}}$ Russian Technical Regulation of the Customs Union on Safety of Milk and Dairy Products (TR TS 033/2013)

E Minimum Required Performance Limit