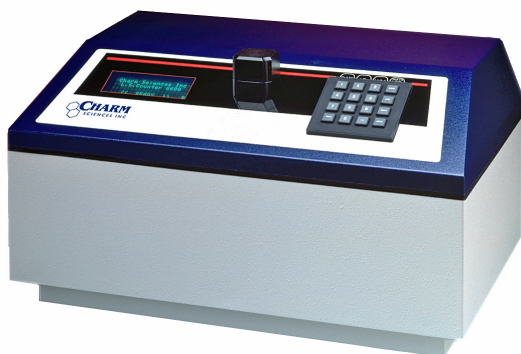


Charm II Antibiotic Analysis for Dairy Products at US Safe Level/Tolerance



Charm II 6600 Analyzer

- FAMILIES DETECTED**
- Aminoglycosides
 - Amphenicols/Chloramphenicol
 - Beta-lactams
 - Macrolides
 - Novobiocin
 - Sulfonamides
 - Tetracyclines

SAMPLE SIZE 5 ml

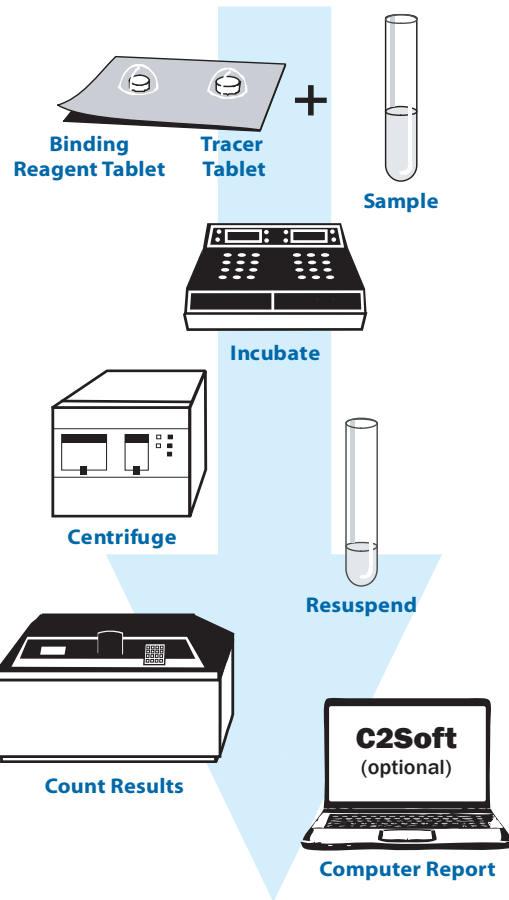
SAMPLE PREPARATION None

PREPARATION TIME None (Raw Milk, Pasteurized)
Minimal preparation required for cream, condensed and powdered.

ASSAY TIME Approximately 10 minutes, depending on drug family.

CAPACITY 6 to 12 samples, depending on assay.

PROCEDURAL FLOWCHART



SAMPLE PRINTOUT

```

Date = 09/23/10
Time = 14:28:12
Operator      = 1
Time Counted = 60
Sample I.D.  = 1258

Assay = Beta-Lactams
Lot#   =      TBL8 041
Control Point = 625
Sample (CPM) = 1025
Interpretation = Not Found
    
```



Charm II Antibiotic Analysis for Dairy products at US Safe Level/Tolerance

Charm II KIT	Drug	Test Sensitivity ¹ (ppb)	Safe Level / Tolerance (ppb)
Aminoglycoside (GTBL)	Gentamicin	24	30
	Neomycin	10	150
Aminoglycoside (STTBL)	Streptomycin	20	125
	Dihydrostreptomycin	75	125
	Gentamicin	25	30
Beta-lactams² (TBL8)	Penicillin-G	3.4	5
	Amoxicillin	8.1	10
	Ampicillin	6.6	10
	Cephapirin	4.1	20
	Ceftiofur ³	58.0	100
	Cloxacillin ⁴	8.5	10
	Other β-lactams	7.5 - 80.0	
Chloramphenicol (CAP)	Chloramphenicol	1	Zero Tolerance
	Florfenicol	40	
	Thiamphenicol	50	
Chloramphenicol (AIIHM)	Chloramphenicol	0.1	Zero Tolerance
Macrolides (ETBL)	Erythromycin	40	50
	Pirlimycin	80	400
	Tilmicosin	20	N/A
	Tylosin	50	50
	Spiramycin	50	N/A
	Lincomycin	100	N/A
	Clindamycin	125	N/A
Novobiocin (NTBL)	Novobiocin	100	100
Sulfonamides (SULFA)	Sulfamethazine	9.4	10
	Sulfadimethoxine	4.0	10
	Sulfadiazine	4.9	10
	Sulfathiazole	7.3	10
	Other Sulfas	2 - 50.0	
Tetracyclines (TET2)	Oxytetracycline	120	300
	Tetracycline	70	300
	Chlortetracycline	260	300
	Other Tetracyclines	100 - 300	

¹ Exceed 90% positive at a 95% confidence limit

² NCIMS (National Conference of Interstate Milk Shipments) approved method for bulk tank/ tanker milk.

³ Parent drug

⁴ A separate NCIMS-approved kit (CTBL-40, CTBL-100, and CTBL-500) detects Cloxacillin at 8.5 ppb

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