

# Charm II Antibiotic Analysis for Grain Products



**Charm II 7600 Analyzer**

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

**SAMPLE SIZE** 50 to 100 g

**SAMPLE PREPARATION** Homogenize product in extraction solution for 60 seconds.

Filter or centrifuge for 3 minutes.

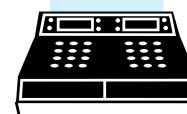
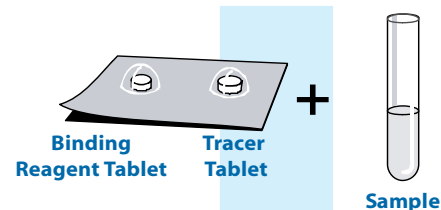
Test supernatant.

**PREPARATION TIME** Approximately 10-15 minutes, depending on the number of samples.

**ASSAY TIME** Approximately 10 minutes, depending on drug family.

**CAPACITY** 6 to 12 samples in assay, depending on drug family.

## PROCEDURAL FLOWCHART



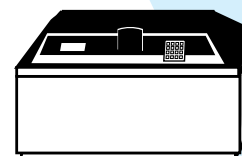
Incubate



Centrifuge



Resuspend



Count Results



Computer Report

## SAMPLE PRINTOUT

```

Date = 08/23/10
Time = 14:28:12
Operator      = 1
Time Counted = 60
Sample I.D.   = 7764

Assay = Chloramphenicol
Lot#   = ATBL 014
Control Point = 2564
Sample (CPM) = 3676
Interpretation = Not Found
    
```



# Charm II Antibiotic Analysis for Grain Products

Charm II KIT	Drug	Test Sensitivity <sup>1</sup> (ppb)
<b>Aminoglycosides</b> (STIIHG)	Streptomycin	2000
	Dihydrostreptomycin	7500
	Gentamicin	5000
<b>Aminoglycosides</b> (GIIHG)	Gentamicin	1000
	Neomycin	500
<b>Beta-lactams</b> (PIIG)	Penicillin-G	200
	Amoxicillin	450
	Ampicillin	400
	Cephapirin	200
	Ceftiofur	500
	Cloxacillin	2500
	Oxacillin	3750
	Dicloxacillin	2500
	Cefazolin	1500
	Cefodroxil	1500
	Cefotaxime	400
	Cephalexin	1500
	Cephradine	1500
	Cefquinome	1000
	Hetacillin	400
	Nafcillin	3000
	Penethamate	200
Piperacillin	1000	
Ticarcillin	3500	
<b>Chloramphenicol &amp; other Amphenicols</b> (CIIHG)	Chloramphenicol	40
	Florfenicol	160
	Thiamphenicol	200
<b>Chloramphenicol</b> (AIIHG)	Chloramphenicol	5
<b>Macrolides</b> (EIIIG)	Erythromycin	1000
	Tylosin	1000
	Spiramycin	1000
	Pirlimycin	2000
	Tilmicosin	1000
	Lincomycin	2500
<b>Sulfonamides</b> (SMIIHG)	Sulfamethazine	500
	Sulfadimethoxine	200
	Sulfathiazole	400
	Sulfadiazine	200
<b>Tetracyclines</b> (TIIHG)	Tetracycline	100
	Chlortetracycline	800
	Oxytetracycline	800

<sup>1</sup> Exceed 90% positive at a 95% confidence limit

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