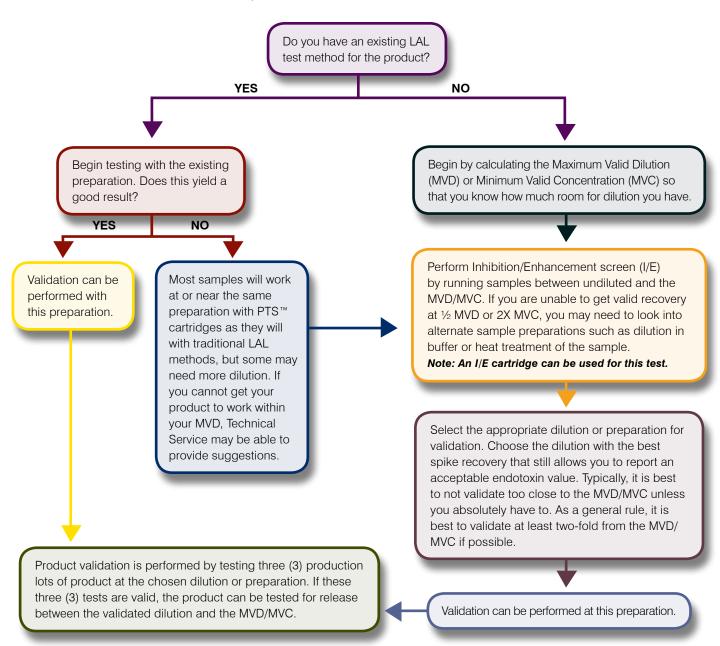
# Endosafe®-PTS™ Quick Start Guide

# Getting Started with PTS™

In a regulated environment, there are three (3) steps to using the Portable Test System (PTS™) for product release:

- 1. The unit should be qualified. Charles River Laboratories has an IQ, OQ, PQ document available for purchase (PTS502).
- 2. Standard Operating Procedures outlining testing using the system should be in place. Charles River Laboratories can provide a sample Standard Operating Procedure.
- 3. Product validation should be completed.

## **Product Validation Steps**



# Using the PTS™

# Performing Routine Tests

A routine PTS™ LAL assay is conducted by following the simple prompts on the PTS™ instrument. The following represents a typical assay procedure:

#### 1. Instrument Operation

- Press the MENU key on the PTS<sup>™</sup> keypad to turn instrument on (Menu 5 turns instrument off).
- The PTS™ reader initiates a "SYSTEM SELF TEST" as it heats up to 37 C; this takes approximately five minutes.
- The PTS™ reader displays "SELF TEST OK" and then "INSERT CARTRIDGE".

### 2. Insert the Cartridge

- Remove cartridge from pouch and insert with sample reservoirs facing up into the slot at the front of the PTS™ reader.
- Press cartridge firmly into the slot.

Note: PTS™ cartridge should be stored at 2-25°C. Allow the cartridge to come to room temperature in pouch before opening.\*

### 3. Enter Required Information

Once the cartridge has been firmly inserted into the PTS™ reader, the PTS™ reader prompts the user to enter the following information:

- Enter OID (operator ID).
- Enter Lot # (cartridge lot number).
- Enter Calibration Code Each lot of cartridges will have a unique calibration code. If the calibration code for the particular lot number has already been entered, the PTS™ reader does not prompt for the code again. To erase all stored lot numbers and corresponding calibration codes, select MENU 2 and then 4 from the initial menu.
- Lot # Confirms cartridge lot number entered.
- Enter Sample Lot #.
- Enter Sample ID Selecting and scrolling with the MENU key under the Sample ID header allows for fifty (50) samples to be entered and stored.
- Enter Dilution Factor.

#### 4. Dispense the Sample

Once all test information is entered, the PTS™ reader displays:

- ADD SAMPLE: PRESS ENTER.
- Pipette 25  $\mu$ L of sample into all four (4) sample reservoirs of the inserted cartridge and press ENTER on the PTS<sup>TM</sup> reader keypad.
- Pumps draw sample aliquots into the test channels, thereby initiating the test.

Results will be obtained in approximately 15 minutes if sample has no detectable endotoxin.

<sup>\*</sup> Cartridges should come to room temperature in approximately 10-15 minutes if stored refrigerated at 2-8°C.

## Retrieving Results

### From Epson or Seiko printer:

- 1. Connect Cable Serial port connection to printer and RJ45 plug in back of the PTS™ reader (cable is provided with PTS™ system).
- 2. Press the MENU key on the PTS™ reader keypad.
- 3. Select 4 for the Print Menu.

### The options for downloading data to the printer are:

- 1-PRINT LAST TEST
- 2-PRINT BY DATE
- 3-PRINT ALL TESTS
- 4. Selecting one (1) of the above three (3) choices on the PTS™ reader keypad will send results to the printer.

Results can also be retrieved in a secure electronic format through optional EndoScan-V™ software and PC. Refer to the PTS™ User's Guide for instructions.

## Interpretation of Results

### Sample EU/mL:

Endotoxin value of the sample with dilution factor taken into account.

#### Sample RT CV:

Coefficient of variation for the sample channel reaction times; Must be <25% for a valid test result.

#### Spike RT CV:

Coefficient of variation for the spike channel reaction times; Must be <25% for a valid test result.

#### Spike Recovery:

Percentage of the positive product control or spike that was recovered; Must be between 50 and 200% for a valid test result.

# Challenging the PTS™

One of the more common questions from new PTS™ customers is: "Why is my solution not giving the expected value with the PTS™ system?" and usually this is because the system is being incorrectly challenged, using Control Standard Endotoxin (CSE). CSE and other non-primary standards cannot be used for endotoxin verification on the PTS™. In order to use CSE, a manufacturer must standardize CSE against the Reference Standard Endotoxin (RSE) on a lot-specific basis to obtain an EU/ng ratio for that lot combination. We perform all testing on the PTS™ cartridges using the RSE, which is the USP/FDA standard. RSE must be used to obtain appropriate values because there has been no RSE/CSE standardization performed for PTS™ cartridges as it has with LAL/CSE combinations.

# **Battery Information**

The PTS™ comes with an internal battery to make the system truly portable, but often the unit is used in a single location in the lab, where it can be used on AC power at all times. Constantly being connected to a power source will shorten the life of the battery. To extend the life of the battery, it should be discharged fully at least once every two-three weeks. The unit will not start a test unless there is enough battery power to complete the assay, so there is no need to worry about a test being aborted due to a low battery. More detailed information on this subject is available in the user's guide.

# Accessory Products for the PTS™\*

### PTS™ Cartridges

Cartridges come in a variety of sensitivities and packaging configurations, as well as FDA-licensed and unlicensed. Licensed cartridges should be used for official release of product, and unlicensed cartridges are good for research & development.

### PTS™ Inhibition and Enhancement Cartridges

Inhibition/Enhancement cartridges allow four (4) samples or four (4) dilutions of a sample to be tested on one (1) cartridge to determine the presence of inhibition or enhancement. These cartridges do not detect endotoxin in the sample and only report a spike recovery value, so samples evaluated on I/E cartridges should be free of detectable endotoxin.

#### LAL Reagent Water (LRW)

LRW is water that is free of detectable endotoxin and non-interfering to the assay. Charles River Laboratories offers LRW in a variety of sizes.

#### **Dilution Tubes**

Tubes for sample dilution should be free of detectable endotoxin. Charles River Laboratories offers a variety of sizes of borosilicate tubes for dilution.

#### **Buffers**

Charles River Laboratories offers several buffers for sample adjustment to account for pH, divalent cation reduction, and glucan-related interference. Contact Technical Service for advice on buffer use.

#### **Pipettes**

Charles River Laboratories offers glass depyrogenated, serological pipettes in a variety of sizes. Pipettes used for sample dilution should be free of detectable endotoxin and non-interfering to the assay.

#### 25 µL Pipettor

A mini, disposable pipettor is supplied with the PTS<sup>TM</sup> system; however, we recommend a calibrated fixed-volume pipettor for regular use. 200  $\mu$ L tips are also available.



<sup>\*</sup> Not Included. See catalog for pricing and product codes.