Cat #	669-100	669-500
Doc.No.	TI-0669	r02

Technical Insert:

TB Sterile Phosphate Buffer

Manufacturer/Supplier:

Scientific device Laboratory, 411 Jarvis Avenue, Des Plaines, IL. 60018 USA
General And Technical Information phone Number: 847-803-9495
Website: www.scientificdevice.com

Intended Use:

SDL's Phosphate Buffer (pH 6.8) reagent is recommended for use in qualitative procedures for neutralization of clinical specimens in the digestion/decontamination for mycobacteriological and sputum mycological cultures.

Summary and Explanation:

Most clinical specimens that are sent to the laboratory for culture of suspected Mycobacterial infections are contaminated by rapid growing normal flora. In order to maximize the Mycobacterial yield of a clinical specimen, N – acetyl-l-cysteine (NALC) is used with the clinical specimen as a digesting, decontaminating, and mucolytic agent. NALC is effective as a digestant only in the reduced form: when oxidized to the cysteine. In the reduced state chemical acts to break disulfide bonds that are in mucous and ultimately to thin out the mucoid sputum.

Principle of the Procedure:

Phosphate Buffer (pH 6.8) neutralizes the continued actions of the Sodium Hydroxide or other decontaminating agent, and lowers the viscosity of the mixture.

Components:

Disodium Phosphate
Monopotassium Phosphate
Demineralized Water

Warning:

This product is the In Vitro diagnostic use only and should be used by properly trained individuals. Precautions should be taken against the dangers of microbiological hazards by properly sterilizing specimens, containers and media after use. Directions should be read and followed carefully. This product should not be used if 1. There is evidence of contamination. 2. The Color has changed. 3. The expiration date has passed. 4. There are other signs of deterioration.

Storage:

Store at room temperature (15° C to 30°) do not freeze. Do not open until ready for use.

Reagent use:

1. In a biological safety hood, use an aerosol-free 50ml centrifuge tube with screw cap. Add equal amounts of clinical specimen and activated digestant solution (approximately 10ml of each) to tube.
2. Cap centrifuge tube and mix on a Vortex until specimen is liquefied. If specimen is especially vicious, add more digestant and repeat mixing.
3. Allow mixture to stand at room temperature for approximately 15 minutes and occasionally mix/shake tube gently.
4. Add sterile phosphate buffer (pH6.8) to the 50mL. Mark on centrifuge tube, mix. Centrifuge for 15 – 20 minutes at 3000 X g.
5. Decant supernatant fluid into Splash-proof discard container (Cat No 250-252) which contains 5% phenol or and equivalent disinfectant.
6. Add small quantity of phosphate buffer to tube and suspend the sediment. Use the sediment for preparation of smears, and Mycobacterial procedures and cultures.

Revision History	Revision
0420-001	02