

# **Technical Data**

## Mycoprep (for 2 tests)

**FD173** 

A combination mixture for decontamination and liquefaction of specimen. N-Acetyl L-cysteine (NALC) is a mucolytic agent that can rapidly digest sputum when used at a concentration of 0.5 to 2.0%. Decontamination is achieved by the addition of sodium hydroxide, while sodium citrate gives stabilizing effect on the NALC by chelating heavy metal ions present in the specimen and which may inactivate the NALC. The phosphate buffer minimizes the continuing action of NaOH and also allows the efficient sedimentation of mycobacteria by centrifugation, by lowering the specific gravity of the specimen.

### **Composition**

Per kit sufficient for 2 tests

Ingredients	Concentration
Kit contents (1 bottle each of following)	
R032: Sodium citrate - hydroxide buffer	20ml
R033 : Phosphate buffer	100ml
R034 : NALC (N-acetyl-L-cysteine)	0.100g
Formula:	
R032 : (per vial, 20ml)	
Trisodium citrate	0.290g
Sodium hydroxide	0.400g
Distilled water	20ml
R034 : (per vial 0.1gm)	
N-Acetyl-L-cysteine	0.100g
R033 : (per vial, 100 ml)	
Disodium hydrogen phosphate	0.470g
Potassium dihydrogen phosphate	0.470g
Distilled water	100ml

#### **Directions:**

Aseptically mix 0.1 gm of N-Acetyl-L-cysteine (R034) in 20 ml of Sodium citrate-hydroxide buffer (R032). Use immediately and within 24 hours only. Transfer a maximum volume of 10 ml of specimen to a sterile graduated 50 ml plastic centrifuge tube having a leak proof cap. Add an equal volume of the above solution. Mix the contents thoroughly by inverting with the cap tightened. Mix on vortex mixer for approximately 20s until the contents are liquefied. Allow the mixture to stand for 15 minutes at 20 to 25°C with occasional gentle shaking by hand. Do not overprocess as this will reduced the recovery of mycobacteria.

Add phosphate buffer (R033) up to the 50 ml mark on the tube. Recap the tube and swirl it by hand to mix the contents well. Centrifuge the solution for at least 15 minutes at  $\geq$  3000 xg. Preferably use a refrigerated centrifuge. Carefully decant the supernatant fluid into a splash-proof discard containing suitable disinfectant.

Add to the sediment, 1 to 2 ml of phosphate buffer pH 6.8 with a sterile pipette and resuspend the sediment with the pipette or by gently shaking the tube. Inoculate onto solid culture media (M162-L J Medium Base, M199-Middlebrook 7H10 Agar etc.) or use for preparing a smear for staining.

Remarks: Good laboratory practices and hazard precaution must be observed.

#### **Storage and Shelf Life**

Store at 2-8°C. Use before the expiry date on the label.

Revision : 1 / 2012

#### Disclaimer:

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