



PROTOCOL FOR DETERMINATION OF EFFECTIVENESS OF 70% IPA AFTER STORAGE PERIOD OF 7 DAYS

OBJECTIVE:

To determine the effectiveness of 70% IPA used for hand washing after storage for a period of 7 days.

ACCEPTANCE:

- 1) The initial bio-load of both the freshly prepared and stored hand disinfectant 70% IPA solution must be nil.
- 2) There should be a significant reduction in microbial counts on the hands after use of the both freshly prepared and stored 70% IPA solution.

CONTROL:

- 1) Impression of the hand on the contact plates without using 70% IPA (Positive control).
- 2) Quarantined contact plated (Negative control).

PROCEDURE:

- 1) **Drop Test:** Take 10 ml of the freshly prepared 70% IPA solution and dilute in the proportion of 1:10 in Nutrient broth. Place 10 drops of this solution on the surface of two well dried nutrient agar plates separately. Incubate one of the plate at 36-38°C for 3 days and the other at 20-25°C for 7 days. Repeat the above steps for testing the stored 70% IPA solution.
- 2) **Contact Plate technique:**
 - a) Prepare contact plates using Soyabean Casein Digest Agar (SCDA) and Sabouraud Dextrose Agar (SDA).
 - b) Take impressions of the right palm on SCDA and left palm on SDA (without wiping with 70% IPA) under laminar air flow. Incubate the plates at 30-35°C for 3 days and 20-25°C for 5 days respectively. Count the number of colonies observed.
 - c) Expose the hands to the normal working environment for at least 3 hours carry out disinfection of the hands using freshly prepared 70% IPA solution. Allow the hands to dry completely. Repeat step (b).
 - d) Repeat step (c) using the stored 70% IPA solution.

PROTOCOL APPROVAL:

PREPARED BY:	CHECKED BY:	APPROVED BY:
QUALITY CONTROL	HEAD – QUALITY CONTROL	HEAD – QUALITY ASSURANCE



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OBSERVATIONS:

Disinfectant solution :

Valid upto :

Date of preparation :

Date :

Sign :

1. Drop Test:

Item	Bacterial Count 37±1°C for 3 days	Fungal count 20-25°C for 7 days
Freshly prepared 70% IPA		
70% IPA after storage for 7 days		

2. Contact plate technique.

Item	Medium	cfu / plate
Plates before hands disinfection		
Plates after hand disinfection freshly prepared 70% IPA		
Plates after hand disinfection with stored 70% IPA.		

DETAILS OF MEDIA USED:

Name of medium	Load No.	Date / Sign
Soyabean Casein Digest Agar (SCDA)		
Sabouraud Dextrose Agar (SDA)		
Nutrient Broth (NB)		
Nutrient Agar (NA)		

VALIDATION RESULTS:

TESTS	RESULTS	ACCEPTANCE CRITERIA
Freshly prepared 70% IPA		Significant reduction in microbial counts observed.
70% IPA after 7 days of storage		Significant reduction in microbial counts observed

CONCLUSION: