

MICROBIOLOGY DEPARTMENT

STANDARD OPERATING PROCEDURE

Department: Microbiology	SOP No.:	
Title: Cleaning of Glasswares for Microbiological Testing	Effective Date:	
Supersedes: Nil	Review Date:	
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1.0 OBJECTIVE:

To lay down a procedure for Cleaning of Glasswares for Microbiological Testing.

2.0 SCOPE:

This SOP is applicable for Cleaning of Glasswares for Microbiological Testing at Microbiology Section.

3.0 RESPONSIBILITY:

Officer / Executive - Microbiology

4.0 ACCOUNTABILITY:

Head - QC

5.0 ABBREVIATIONS:

°C	Degree Celsius
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- IPA Isopropyl Alcohol
- Ltd. Limited
- No. Number
- QA Quality Assurance
- QC Quality Control
- PPE Personal Protection Equipment
- ETP Effluent Treatment Plant
- SOP Standard Operating Procedure

6.0 **PROCEDURE:**

6.1 **PRECAUTIONS:**

- **6.1.1** Wear Gloves, Nose Mask and other PPE (Whenever required) before washing the petriplate /glassware.
- 6.1.2 All microbiological glassware used in analysis should be decontaminated before washing.
- **6.1.3** To remove labeling of glassware use 70% IPA.

6.2 CLEANING OF NEW GLASSWARE:

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- **6.2.1** Unpack the newly received glassware and rinse it with flowing tap water and finally rinse it with purified water.
- **6.2.2** Newly manufactured (received) glassware is slightly alkaline and should be soaked for sufficient time in acid water (1% v/v solution of Hydrochloric or Nitric acid), and to be washed /cleaned with plenty of running water and finally with purified water.

6.3 CLEANING OF PETRI PLATES:

- **6.3.1** Wear Gloves and Nose Mask Before washing the petriplate.
- **6.3.2** Kept all Petriplate in a disposable autoclave bags and transfer in to autoclave, start the discard cycle of autoclave as per **SOP** Titled **"Procedure for Operation and Discarding of media in Vertical Autoclave"**.
- **6.3.3** After Autoclave Remove autoclaved disposable Petri plates into a disposable bag and send to outside party for further disposal.
- **6.3.4** After Autoclave Remove the content from the autoclaved Glass Petri plates into a disposable bag and keep aside for disposal.
- **6.3.5** Immerse the Glass Petri plates in tub containing 2% v/v (20 ml of cleaning agent added in purified water and make the volume to 1000 ml, using purified water) cleaning agent i.e. Extran solution for 20-30 minutes.
- **6.3.6** Finally, wash the Glass Petri plates with purified water to remove the cleaning agent completely as detected physically by absence of any foam.
- **6.3.7** Keep the washed Glass Petri plates in hot air oven at 50°C to 60° C and allow them to dry.
- **6.3.8** Whenever use glass Petri plates follow point number 6.1.5, 6.1.6 and 6.1.7.
- **6.3.9** Wash the hands with soap Solution and then Sanitize with 70% IPA after completion of work.

6.4 CLEANING OF CONICAL FLASKS/BOTTLES FOR MEDIA PREPARATION:

- **6.4.1** Wear gloves and nose mask before washing the conical flasks/bottles.
- **6.4.2** Wash with Purified water and then treat with 2% v/v cleaning agent i.e. Extran and keep for 20-30 minutes.
- **6.4.3** Finally wash the flasks/ Bottles with purified water to remove the cleaning agent i.e. Extran solution completely as detected physically by absence of any foam.



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- **6.4.4** Keep the washed flasks/ Bottles in hot air oven at 50°C to 60°C and allow them to dry.
- 6.4.5 Wash the hands with soap solution and then Sanitize with 70% IPA after completion of work.

6.5 CLEANING OF TEST TUBES:

- **6.5.1** Wear Gloves and Nose Mask before washing the test tubes.
- **6.5.2** After Autoclave remove the content from the autoclaved test tubes into a disposable bag and keep aside for disposal.
- **6.5.3** Immerse the test tubes in tub containing 2% v/v (20 ml of cleaning agent added in purified water and make the volume to 1000 ml, using purified water) cleaning agent i.e. Extran solution for 20-30 minutes.
- **6.5.4** Finally, wash the test tubes with purified water to remove the cleaning agent solution completely as detected physically by absence of any foam.
- **6.5.5** Keep the washed test tubes in hot air oven at 50° C to 60° C and allow them to dry.
- **6.5.6** Wash the hands with soap Solution and then Sanitize with 70% IPA after completion of work.

6.6 CLEANING OF FILTRATION ASSEMBLY AND OTHER ACCESSORIES:

- **6.6.1** Wear Gloves and Nose Mask before washing the all SS Assembly and other accessories.
- **6.6.2** Immerse the SS Assembly and other accessories in tub containing 2% v/v (20 ml of cleaning agent added in purified water and make the volume to 1000 ml, using purified water) cleaning agent i.e. Extran solution for 20-30 minutes.
- **6.6.3** Use stiff bristled brush to remove all stubborn residues from recesses and orifices.
- **6.6.4** Clean the porous grit of the filter support by first back flushing with water , follow by second back flushing
- **6.6.5** Finally, wash the SS Assembly and other accessories with purified water to remove the cleaning agent solution completely as detected physically by absence of any foam.
- 6.6.6 Do not wipe with paper and cloth.
- **6.6.7** Wash the hands with soap Solution and then Sanitize with 70% IPA after completion of work.
- 6.6.8 Record the Glasswares Cleaning details in Annexure-I, Titled "Glasswares Cleaning Record".



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7.0 ANNEXURES:

ANNEXURE No.		TITLE OF ANNEXURE	FORMAT No.	
	Annexure – I	Glasswares Cleaning Record		

ENCLOSURES: SOP Training Record.

8.0 **DISTRIBUTION:**

- Controlled Copy No. 1 Quality Assurance
- Controlled Copy No. 2 Microbiology
- Master Copy
 Quality Assurance

9.0 **REFERENCES:**

Not Applicable

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

R	Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By



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ANNEXURE-I GLASSWARES CLEANING RECORD

Date	Type of Glassware	Glassware's Qty. (In Nos.)	Cleaning Agent	Done By Sign & Date
	Bottles			
	Tubes			
	Flask			
	Petriplates			
	Bottles			
	Tubes			
	Flask			
	Petriplates			
	Bottles			
	Tubes			
	Flask			
	Petriplates			
	Bottles			
	Tubes			
	Flask			
	Petriplates			