



# PHARMA DEVILS

## ENGINEERING DEPARTMENT

### STANDARD OPERATING PROCEDURE

<b>Department:</b> Engineering	<b>SOP No.:</b>
<b>Title:</b> Specification of LAF/RLAF Filters	<b>Effective Date:</b>
<b>Supersedes:</b> Nil	<b>Review Date:</b>
<b>Issue Date:</b>	<b>Page No.:</b>

#### 1.0 Revision History

Rev. No.	Details of changes	Reason for change
00	NIL	NEW SOP

#### 2.0 OBJECTIVE:

2.1 Objective of this SOP is to provide the Specifications of Filters to be used in LAF/RLAF units.

#### 3.0 SCOPE:

3.1 This SOP is applicable for the provide the Specifications of Filters to be used in LAF/RLAF Units.

#### 4.0 RESPONSIBILITY:

4.1 The Maintenance Engineer shall be:

4.1.1 Responsible for ensuring the specification at the time of releasing of new order.

4.1.2 Responsible to ensure the compliance of specifications at the time of receipt.

#### 5.0 ACCOUNTABILITY:

Head –Engineering Services

#### 6.0 PROCEDURE:

6.1 Following are the specifications of the filters being used for Laminar Air Flow Unit/Reverse

Laminar Air Flow unit to maintain the required cleanliness in the working zone.

#### 6.2 LIST OF FILTERS:

##### 6.2.1 LAF UNITS

6.2.1.1 Pre-filters

6.2.1.2 HEPA filter



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#### 6.2.2 RLAF UNITS

6.2.2.1 Pre-filters

6.2.2.2 Intermediate filters

6.2.2.3 HEPA filters

6.2.2.4 Bleed off filters

#### 6.3 LAF Units:

##### 6.3.1 Intermediate filters

6.3.1.1 Filter grade : EU-7

6.3.1.2 Filter efficiency : 99.0 – 99.9 % Down to 3.0 $\mu$  (Micron)

6.3.1.3 Filter media : Non woven Polyester Sandwiched in  
3 layers of HDPE mesh

6.3.1.4 Filter frame : Aluminium (18 Gauge)

6.3.1.5 pressure drop in clean condition : 2.0 – 3.0 mm of w.g.

6.3.1.6 Pressure drop in saturated condition: 18.0 - 20.0 mm (Millimeter) of w.g.

6.3.1.7 Filter size : (W-24”) x (B24”) x (D2”)  
(Width, Breadth, Depth)

##### 6.3.2 HEPA Filters:

6.3.2.1 Filter grade : EU-14

6.3.2.2 Filter efficiency : 99.999 % Down to 0.3 $\mu$

6.3.2.3 Filter media : Micro glass fiber (Minipleat) of 0.16” thickness

6.3.2.4 Filter frame : Aluminums (18 Gauge)

6.3.2.5 Pressure drop in clean condition : 7.0 – 15.0 mm of w.g.

6.3.2.6 Pressure drop in saturated condition : 45.0 - 50.0 mm of w.g.

6.3.2.7 Filter size : (W-24”) x (B48”) x (D3”)  
(Width, Breadth, Depth)

6.3.2.8 Rated Velocity : 90 fpm $\pm$ 20%

#### 7.0 ANNEXURES:

NIL



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### 8.0 References (S)

NIL

### 9.0 Glossary

SOP	: Standard Operating procedure
No	: Number
HDPE	: High Density Poly Ethylene
W.G.	: Water Gauge
MM	: Millimeter
LC	: Least count
LAF	: Laminar Air Flow
RLAF	: Reverse Laminar Air Flow