

Elutriation Sieve SVA-21, SVA-22, SVA-23, SVA-24 & SVA-25

INTRODUCTION:

The Elutriation Sieve is used to separate coarse particle fractions of a sample by washing away the fines through fine-mesh wire cloth. It is especially useful when determining the quantity of material in soils and aggregates passing a No.200 (75µm) sieve. The Elutriation Sieve has approximately 12% more mesh area than a conventional 8in (203mm) diameter sieve and is available with factory-installed wire cloth in a range or openings from No.170 (90µm) to No.325 (45µm).

FEATURES:

The Elutriation Sieve consists of a 15x3.25in (381x82.6mm), HxDia. heavy walled acrylic plastic cylinder. Four vertical "windows" are covered with testing grade stainless steel wire cloth. A copper tube with two inlets for connection to water and air supplies is also provided.

OPERATING INSTRUCTIONS:

Pass the test specimen through a No.4 (4.75mm) sieve before placing in the Elutriation Sieve.

NOTE: Washing samples containing particles larger than the No.4 sieve opening may damage the mesh.

The Elutriation Sieve should be placed in a flat bottom sink, pan or drain. Fill the Sieve with water to the bottom of the windows. Transfer the sample into the Elutriation Sieve carefully, and wash all material into the sieve.

NOTE: Gilson recommends a maximum load of 250g of sample at one time. Processing a larger sample may result in damage to the mesh.



SVA-22

Once the elutriation tube is connected to water and compressed air supplies, carefully insert the tube into the sieve to a point just below the windows. **SLOWLY** turn on the compressed air, adjusting the rate to an agitation that is just sufficient to cause the material to go into suspension.

NOTE: Agitating the suspension too vigorously could cause sample loss over the top of the sieve.

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Gradually increase the water flow so the water level stays constant near the top of the windows. If the mesh begins to blind, tap gently with your hand or wash down inside with a gentle stream of water.

Washing should continue until the material is completely broken down and the wash water becomes clear. Turn off the water and compressed air and remove the elutriation tube. Gently wash the sample into a container of sufficient capacity to hold water and sample. Allow the sample to settle and decant the excess water through a sieve of equivalent mesh size, taking care to avoid loss of material. Dry the sample to a constant mass and recombine with the oversize fraction (>No.4) of the specimen, if any, for a final determination of mass.

ACCESSORIES:

ELUTRIATION SIEVE ACCESSORIES	
Description	Model
Acrylic Frame only	SV-48
Vinyl Tubing for Air/Water Injector, per foot	WT-8
Hose Clamp	MA-198
12in (305mm) dia. Pan with Drain	WT-10
Vinyl Tubing for WT-10, per foot	WT-4