

### Overview

The VWR Nutating Mixer is a three dimensional shaker typically used for maintaining the uniform suspension of blood components in blood collection tubes without foaming. The VWR Nutating Mixer is also ideal for mixing large strands of DNA into solution in micro tubes or mixing blood into a buffer in large centrifuge tubes. The Nutating mixer achieves it's 3-dimensional mixing by combining the rotating motion of an orbital shaker with the rocking motion of a platform rocker.

The modern styling of the VWR Nutating Mixer's housing is achieved through the use of injection molded FR-ABS plastic. The large platform is constructed of powder coated aluminum topped with a rubber TPE mat.

### Installation

The VWR Nutating Mixer can be used on a bench, in a cold room or in an incubator up to 40C. Place the unit on a flat stable surface and be sure to leave sufficient room around the unit to allow both the platform and load to move freely. A minimum of 4 inches (10cm) clearance on all sides of the mixer is advised.

Plug the unit into a properly grounded outlet of the appropriate voltage as shown on the units data plate label.

### Operation

Tubes may be placed directly on to the dimpled mat. The dimple pattern is configured to allow blood tubes and centrifuge tubes to be securely placed on the mat without additional strapping in most cases. If tubes are to be stacked, they should be secured with rubber bands or bungee cords. Holes in the corners of the platform edges are provided for this purpose.



Always load the platform in a uniform and balanced fashion.

Use the On / Off switch to turn the unit on. The direction of rotation in which the unit starts is random and does not affect mixing. If desired, the rotational direction can be reversed by holding the unit's base and very briefly touching the rotating platform on the bottom at one corner. This technique can also be used to select the quietest direction of rotation.

### Maintenance



Always disconnect cord from power source before maintaining or servicing.

The VWR Nutating Mixer requires no maintenance other than occasional cleaning with a damp cloth with mild detergent. The rubber dimpled mat may be washed in soap and water. **Do not immerse the unit in water or spill liquids over the unit.** Be sure the unit is dry before reconnecting to power.

### Service & Repair

The VWR Nutating Mixer is a well built unit that should provide years of trouble free service. Should service be needed, contact your local representative or visit [vwr.com](http://vwr.com). Service should only be performed by a qualified service technician.

### Specifications

Mixing action: 3 dimensional rocking rotating

Mixing speed: 24 rpm fixed (120V model) 20 rpm fixed (230V model)

Platform Tilt angle: 20 degrees fixed

Platform dimensions: 9.5 in. x 6.75 in (24cm x 17cm)

Mixer dimensions wxhxd: (9.5 in x 5.75in x 6.75) (24cm x 14.6cm x 17cm)

Mixer weight: 1.88 lbs (0.85 kg)

Platform load capacity: 1.75 lbs balanced (0.8kg)

Platform capacity without stacking: 60 x 1.5ml micro centrifuge tubes; 30 x pediatric blood tubes (3ml); 17 x 15ml centrifuge tubes; 21 x standard blood tubes (7ml); 9 x 50ml centrifuge tubes

Ambient operating range 4C to 40C

Electrical: 120V, 50/60Hz, 0.03 amps or 230V, 50 /60Hz, 0.015 amps