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 bungie cords. Holes in the corners of the platform edges are provided for this purpose.

Attention! Always load the platform in a uniform and balanced way.

5. Maintenance

<u>Attention!</u> Always disconnect cord from power source prior to maintenace or servicing.

GM 1 requires no maintenance other than occasional cleaning with a damp cloth with mild detergent. The rubber mat may be washed in soap and water.

<u>Attention!</u> Do not immerse the unit in water or spill liquids over the unit. Be sure the unit is dry before reconnecting to power.

6. Repair

GM 1 is an expertly built unit that should provide years of trouble free service. Should service be needed, contact the telephone number and address given below. Do not send the unit without prior consultation. Use the enclosed contamination questionnaire or request a new copy. Decontaminate the mixer prior to dispatch. For transport, the instrument must be safely packed in order to avoid damage. The sender will be responsible for any damage that results from improper packing.

7. Accessories

Ref.-No. 92.181.410

Description

Dimpled mat for Sarmix® GM 1

8. Technical Service

Contact your local Sarstedt partner or:

SARSTEDT AG & Co. Rommelsdorfer Strasse D-51588 Nümbrecht

Phone (+49) 0 22 93 30 50 Fax (+49) 0 22 93 305 285

(**Service 0800 (Germany)** Phone (0800) 083 30 50





Read these instructions carefully prior to start and work with the instrument. Keep them available any time.

1. General Information

Sarmix[®] GM 1 is a mixer with 3-dimensional motion. It is typically used for maintaining the uniform suspension of blood components in blood collection tubes without foaming. GM 1 is also ideal for mixing large strands of DNA into solution in micro tubes or mixing blood into a buffer in large centrifuge tubes. Moreover, the GM 1 mixes blood and buffer solution in large centrifuge tubes.

2. Technical data

Type of movement: Gyro / 3-D

Angle: 20°

Speed: 50 Hz = 20 rpm / 60 Hz = 24 rpm

Max. load: 0.8 kg

Dimensions (W x D x H): 240 \times 170 x 150 mm Power supply: 230 V +/- 10 %, 50 / 60 Hz Power consumption: approx. 3 W (approx. 15 mA)

Ambient temperature: $+ 4^{\circ}\text{C}$ to $+ 40^{\circ}\text{C}$

3. Installation

GM 1 may be used on a work bench, in a refrigerated room or in an incubator up to 40 °C. The base surface must be flat and stable. It must provide sufficient space for the platform and its load to move freely. A minimum distance of 10 cm on each side is recommended.

4. Operation

Check the information about the electrical voltage on the label at the base of the instrument. Plug in the power line only to a mains socket with grounding.

The instrument is switched on and off at the I/O switch. The direction of rotation in which the unit starts is random and does not affect mixing. If desired, the rotation direction can be reversed by holding the unit's base and very briefly touching the rotating platform at one corner from underneath. This technique can also be used to start and move the platform if it stays in position slightly vibrating after switch on and to select the quietest direction of rotation.

Loading the platform is possible any time, also while rotating. Tubes are placed onto the dimpled mat.