

**Annex to EN 61010-1**

We hereby declare and confirm that the instrument “Nova Safety”, Art.-No. 3670 in view of the european standard “EN 6101-1” concerning tests (especially testing in single fault condition, written under 4.4.2) meets all requirements.

**Details:**

No.	Test	Result
4.4.2.1	Protective Impedance	No dangerous risc
4.4.2.2	Protective conductor	Tested
4.4.2.3	Short-term or intermittent operation	No dangerous risc
4.4.2.4	Motors	No dangerous risc
4.4.2.5	Capacitors	Not existing
4.4.2.6	Mains transformer (4.4.2.6.1. and 4.4.2.6.2)	No dangerous risc
4.4.2.7	Outputs of the electronic controll	No dangerous risc
4.4.2.8.	Equipment for mor than one supply	Not existing
4.4.2.9	Cooling	Not existing
4.4.2.10	Heating devices	No dangerous risc (<105°C)
4.4.2.11	Insulation between circuits and parts	No dangerous risc
4.4.2.12	Interlocks	No dangerous risc

**BENCH CENTRIFUGE  
 NOVA SAFETY**  
 Art. No. 3670



**NovaSafety**



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### **Certificate** **EC-Conformity Declaration**

We hereby declare that in view of its design and construction the instrument "Nova Safety" meets the requirements of the EC rules "machines" with regard to the request of safety and health.

We declare further that all instruments are strictly tested by our internal quality test procedure: Each instrument has passed the end production control.  
In case of modification in use this declaration becomes invalid.

Type of instrument:	Nova Safety, Laboratory centrifuge
Art-No	3670-
Connection:	230 V / 50Hz, 500VA
Applicable EU rules	EC Machine Directive 06/42/EC Low Voltage 2006/95/EC Electromagnetic Compatibility 2006/95/EC <b>EN 61010-1</b> * See Annex: Test in single fault condition
Applicable Standards	IDF 105 ISO 2446 DIN 10310 DIN 58970

**Berlin,**  
**Funke-Dr.N.Gerber Labortechnik GmbH**

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### - The centrifuge does not react when I press the START key. Why?

If you want to start the centrifuge, you must be sure that the lid is correctly closed and the lock engaged. When closing the lid, press it downwards until the lock is engaged. You will hear a "clack". When the centrifuge is braking, the machine does not react to any keyboard instruction. This procedure cannot be modified.

### VI. Technical data

Connection :	230 V AC / 50 Hz
Power consumption :	450 W
Weight (empty) :	13,2 kg
Height (closed) :	230 mm
Width:	380 mm
Length:	470 mm
RCA:	350g +/- 50g
Speed:	1350 rpm
Inner temperature:	65°C (with heating switched on)
Time of centrifugation :	1 - 99 minutes
Lock:	mechanical locking, electrical unlocking

### VII. Ordering Specifications

ART. NR.	DESCRIPTION
3670	Centrifuge Nova Safety
3641	Butyrometer tube, spare

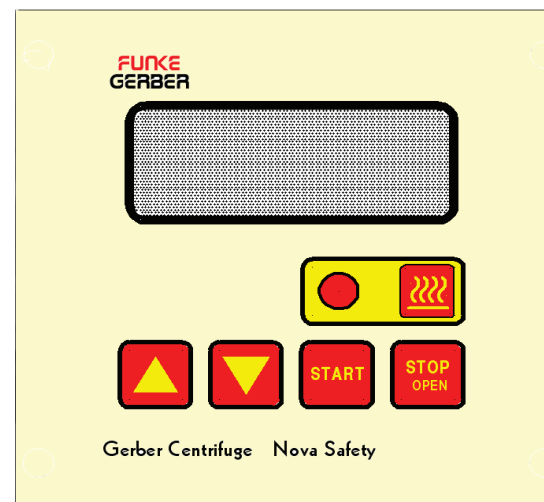
### I. Assemble and start.

The Nova Safety centrifuge is a bench centrifuge equipped with a heating. It is made for the determination of the fat-content according to the Gerber Method. It should be placed on a surface which is flat, horizontal, not flammable and can stand up to 65 °C - Connect the power cord of the centrifuge to a grounded wall socket which is provided with 6 Ampere fuse. The switch is on the front panel of the appliance, on its left side. Switch it on. The display will start displaying within 2 to 3 seconds. Press the key "stop/open" to unlock the lid.

**IMPORTANT :** The housing of the appliance is hot. For this reason, keep away from flammable cloths and steam !

### II. The keyboard.

There are 5 keys :



#### **START**

Starts the centrifugation

#### **STOP**

Stops the centrifugation and opens the lid

▲ Increases the duration of the centrifugation  
▼ Decreases the duration of the centrifugation

#### **HEATING**

Switches on and off the heating. A red light indicates heating to be switched on.

The START key is only effective when the Lid of the centrifuge is closed and if the lock is correctly engaged. When the machine has stopped, unlock the lid with the STOP key.

### III. Adjustment of the centrifuge.

After having assembled and started the machine as described in I., the machine will display, on the front panel, the centrifugation time in minutes. Before using the centrifuge, select the time of centrifugation as needed.

### IV. Using the centrifuge.

The tubes must be placed symmetrically on the head to avoid unbalances. After having placed the tubes, the lid should be closed by pressing firmly downwards until the lock is engaged. The centrifugation process is started by pressing the START key. It will last as long as it has been programmed.

**ADVISE :** The centrifugation process can be stopped manually by pressing the STOP key. The centrifugation can be started again after closing the lid.

**IMPORTANT!:** The inside of the centrifuge must always be kept clean. If a butyrometer was broken and some liquid have been flown outside of the tubes, proceed as follows :

- Pull the plug out of wall socket.
- Take out all butyrometer tubes and unscrew the housing of the motor.
- Clean carefully the inner room of the centrifuge
- Put back the housing of the motor, screw it back and put the butyrometer tubes back in.

**IMPORTANT!:** The inside of the centrifuge is hot !  
The temperature is pre-set on 65°C by the constructor when heating is switched on.  
The speed is pre-programmed at a RCF of 350 G (+/- 50G).

The time of centrifugation is programmable in steps of 1 minute. The information is saved by the machine, even when it is turned out or if the plug has been pulled out of the wall socket. Programming the time of centrifugation can only be done when the machine is stopped, that is it cannot be done during the centrifugation.

**ADVISE !:** The centrifuge counts the time that elapses from the beginning of the centrifugation until the starting of the braking. According to your needs and to the loading, you should take into account the starting phase and the braking phase when programming the time.

### V. Answering some frequent questions.

When using the centrifuge, some questions may arise. In this paragraph, the most often question have been listed and given an answer to.

#### - How should I load the head ?

The head can carry up to 8 pieces. When loading, you should pay attention to the fact that the loading should be symmetrical so as to avoid unbalances- The centrifuge does not switch off automatically in case of unbalances. This is the reason why the machine should not be left unattended.

#### - What are the characteristics of the centrifugation process during the starting and braking phase ?

When starting the centrifuge and when fully loaded, it takes about 20s to reach the normal speed. The Nova Safety has been conceived so that over speeding during the starting phase and during the centrifugation is impossible.

The braking System is electrical and thus gentle and progressive (no shocks).

#### - When is the centrifuge hot ?

When the centrifuge is switched on, the heating is activated. This means that the heating occurs when the centrifuge is stopped as well as when proceeding to centrifugation. Warming up requires approximately 30 minutes.

**ADVISE:** The housing is made of steel. When the centrifuge is warming up, so does the bottom of the housing, too. This is the reason why the centrifuge should be placed on a surface which is not inflammable and which can stand up to 65°C.

#### -How can the centrifuge be opened in case of a power cut ?

In the front part of the appliance, a cord has been fixed on the lock, which is to be pulled for a manual opening of the lid. In case of emergency, unscrew the front panel, pull on the cord : this will unlock the lid.

**IMPORTANT !:** This procedure is an emergency procedure. The centrifuge is not to be manipulated while the cord is hanging out.