Bahnhofstrasse 28 CH-9242 Oberuzwil www.gelinstrumente.com info@gelinstrumente.com

Tel. +41 71 950 28 82 Fax +41 71 950 28 84

GELNORM®-Geltimer GT-SP - SLIM LINE



The GT-SP Slim Line Geltimer with integrated control and time measuring equipment is the compact successor model of the Geltimer TC.

The new Gel Timer is mechanically, and from the point of view of the measuring technology, identical with the standardised Gelnorm[®] Geltimer model of which 1000 are in operation.

The compact design, the LCD lighting for the background and the blinking green button with the coloured running light in the test stamper spiral, make up a simple and conveniently arranged solution.

The voltage used is 24 VAC 50 / 60 Hz obtained via a safety transformer.

The GELNORM®- Geltimer is intended for the measurement of Gelation time of reaction resins in accordance with DIN 16 945 Page 1, DIN 16 919 and DIN EN ISO 9396.

The instrument incorporates a switch-off mechanism that responds to pressure: the gelation time limit is reached when the measuring stamper meets a defined reaction force in the reaction resin. As a result of this automatic switch-off system, the size of resin sample employed is not limited. The disposable stamper of stainless steel wire carries out a defined reciprocating movement as soon as the instrument is set in operation and, when the change in viscosity is reached, a built in timer is stopped and the gelation time can be read off.

- unsat. Polyester resins
- Epoxid resins
- Polyurethane resins
- Acrylic resins
- Silicone resins
- Phenolic resins

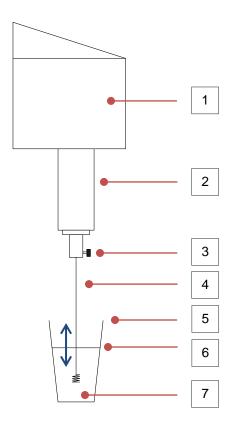






Bahnhofstrasse 28 CH-9242 Oberuzwil www.gelinstrumente.com info@gelinstrumente.com

Description of the Instrument



- 1 Housing GT-SP
- 2 Holder for the mechanic
- 3 Clamping screw for measuring stamp

Tel.

Fax

+41 71 950 28 82

+41 71 950 28 84

- 4 Measuring stamp steel wire
- 5 Beaker
- 6 Height of liquid
- 7 Specimen mixture

Time measurement and the reciprocating cycle

The control unit GT-SP employs a time measuring instrument illuminated from the rear using an LCD system and a start button with optical indicator. Time measurements up to 99 hours 59 minutes 59 seconds can be conducted.

The reciprocating movement of the measuring stamper is set to 10 seconds on the standard unit. On request other reciprocating cycles and movements can be provided.

Preparation

Install the stamper on Geltimer

Connect the power supply

Check, if Timer setting is on 00:00:00

Place 100g reaction resin (deviations of 1% are permissible according to DIN 16 945) in a beaker. Add hardening agent and, if applicable, accelerator of the required quantities as specified by the supplier, measuring to an accuracy of 0,01g After adding of hardening agent stir test mixture (approx. 1 minute).

Set measuring cup under the stamper. Let down the test unit with the stand and adjust the stamper (stamper should be approx. 50% in the specimen mixture)



Bahnhofstrasse 28 CH-9242 Oberuzwil www.gelinstrumente.com info@gelinstrumente.com

Tel. +41 71 950 28 82 Fax +41 71 950 28 84

The blinking light shows in the ring around the START button. Press START button. The start button lights up green and the measuring time is in process.

On reaching the Gel point the stamper is raised, the electronics will stop the motor and the LCD shows the Geltime.

The switch-off mechanism is based on a defined opposing force, which acts on the measuring stamper upwards. This switch-off mechanism is fixed. A control or calibration can be done with a balance.

The stampers are disposed of when the measurement has been completed. These parts are not cleaned for re-use.

Technical Data

Geltimer GT-SP

Time measurement $0 \dots 99h 59min 59s$ Accuracy $\pm 1 second / 2 hours$

Reciprocating cycle 10 secs., on request other reciprocating cycle times can be

offered

Dimensions test unit: ∅ 130 mm

stand: plate 300 x 200 mm / height 540 mm

Total weight ~ 4.8 kg

Housing material eloxed aluminium

Operating voltage 24 VAC Power used 5 VA

Operating temperature $0 \,^{\circ}\text{C} \dots 50 \,^{\circ}\text{C}$ Storage temperature $-30 \,^{\circ}\text{C} \dots 70 \,^{\circ}\text{C}$

Relative humidity < 85 %, not condensing

Place of use only indoors
Height, up to max. 2000 m

Degree of dirt contamination 2

Supply voltage variations +/- 10 %

Access voltage category category II

Ordering code, Article number

Gelnorm® Geltimer GT-SP 100.50

incl. stand and power supply 230 VAC / 24 VAC

Spares material

Stampers – steel wire, package of 500 pcs.

20.35

I = 150 mm

