

Drying Time Recorder (4 time scales, 6 tracks)

BGD 261

Product Description

When developing a process, it is crucial to know the exact time it takes for the coating to dry or cure. There are several stages involved in the coating drying process. Once a coating is applied, the first stage is the leveling of the coating under gravity. As the coating begins to cure, a thin dry film forms on the surface.

Using the Solvica Drying Time Recorder, the operator can easily identify each stage of the drying process:

A ball tip is placed into the coating, and using the mathematical formula: $\text{Distance} = \text{Speed} \times \text{Time}$, the recorder moves this ball at a predefined speed. As the coating dries, the trace left by the ball on the coating identifies each stage of the curing process.

The various stages of drying and curing that occur in films are easy to detect but challenging to define in terms of chemical and physical principles. To evaluate them satisfactorily, it is necessary to use instrumentation under controlled conditions. Solvica offers a versatile drying time recorder that helps quantify the various stages of film curing and drying, delivers reproducible results, and ensures the highest efficiency:

This reliable apparatus is used to test the drying time or gelation behavior of many paints and coatings applied onto a glass strip (330mm × 24mm) using our cube applicator (BGD 203). Hemispherical needles travel across these test tracks over selected time intervals: 6 hours, 12 hours, 24 hours, and 48 hours. The drying time stages can be easily assessed with the graduation scale (according to the traverse speed configuration). The total time for each test can be observed on the LCD screen.

1. Evaporation of solvent: Deep pear-shaped impression
2. Sol-gel transition: Continuous track
3. Surface dry: Interrupted track
4. Final dry time: The needle no longer penetrates the film



Drying Time Recorder (4 time scales, 6 tracks)

BGD 261

Standards

- ASTM D 5895-03
- ISO 9117-4

Technical Specification

- Simultaneous testing of 6 samples – saves time
- Four different speeds: 6, 12, 24, and 48 hours – suitable for any application
- Styli diameter (with rounded tip): 2mm ± 0.05mm (6 pcs)
- Includes 6 stainless steel weights (5 grams per weight) for recording through drying
- Includes a calibration certificate

Drying Time Recorder (4 time scales, 6 tracks)

BGD 261

Main Technical Parameters

Working tracks	6 tracks (measured at the same time)
Setting range for working time	6h - 12h - 24h - 48h
Style diameter (with rounded tip)	2 mm +/- 0.05 mm (6 pcs)
Glass strips size	329 x 24 x 3 mm
Overall size	600 x 570 x 240 mm (L x W x H)
Weight	8 KG
Power	AC 110V~220V, 50~60Hz
Overall Size (LxWxH)	500 x 230 x 155 mm

Accessoires

- BGD 203-1 - Cube Applicator (38 µm / 76 µm) Width 12.7mm
- BGD 203-2 - Cube Applicator (75µm / 150µm) Width 12.7mm
- BGD 2602 - Special Glass Strips (60 pcs)
- BGD 1481 - Glass Panel Holder for BGD 2602 Glass Strips

Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development