

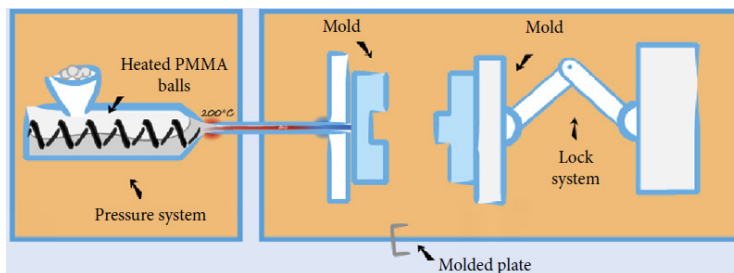
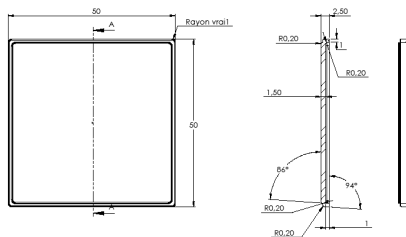


Manufactured by means of a molding process, this substrate is delivered with a quality control ensuring the reproducibility of roughness. These plates are certified with topography parameters in compliance with ISO 24443:2021, ISO/CD 23675, Colipa In Vitro UVA rev. 2011, FDA monograph 2011 and Boots Star Rating system rev. 2011.

PROCESS DESCRIPTION

Overall size (WxLxH): 50 mm x 50 mm x 1.5 mm
 Weight: 4.5 g
 Manufacturing process: Plate by plate
 Package contenance: 50 plates

Spreading area: 47 mm x 47 mm
 Temperature: Optimal temperature range 20-40°C
 Material: PMMA (polymethylmethacrylate)
 Use: To use only one time (cannot be cleaned)



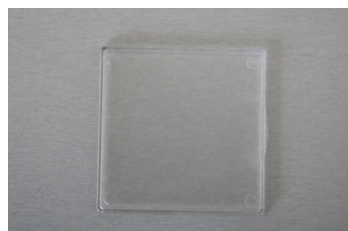
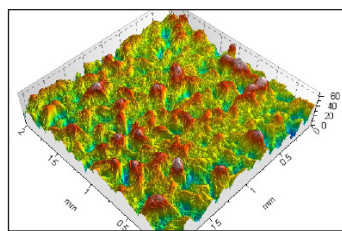
VIEW

2D

3D

One plate

One package



TOPOGRAPHIC PARAMETERS

Surface profile characteristics of the substrate is measured covering at least a surface area of 10 mm x 5 mm in 15-µm intervals. Non-contact surface topographic analysis is conducted using a lab work station consisting of an optical sensor, a motion controller, an x-y translation stage, and microtopography software. A sensor based on a white light chromatic aberration principle is used which allows for a high resolution: 10 nm vertically and 1 µm horizontally.

Parameter	Ra	Rv	Rdq	A1	Ssc	Vvv
Target value	4,853 ± 0,501	13,042 ± 0,989	11,122 ± 2,032	239,750 ± 70,165	0,033 ± 0,021	1,044,10-4 ± 9,76,10-5

Ra (µm): The mean arithmetic deviation of the roughness profile.
 Rv (µm): The maximum depth of profile valleys within a sampling length.
 Rdq (°): The root-mean-square slope of the profile within a sampling length.
 A1 (µm².mm⁻¹): The upper area, i.e. the area of the rest overs of the peaks extending above an average profile ± kernel.
 Ssc (L.µm⁻¹): The arithmetic mean summit curvature of the surface, which indicates the meanform of peaks and valleys.
 Vvv (m³.m⁻²): The volume of void in the valleys, i.e., the volume of rest overs of valleys extending below an average profile ± kernel.

PLATE OPTICAL CHARACTERISTICS

Limits for the treated plate transmission values are: 290 nm >60 %T - 300 nm >69 %T - 320 nm >81 %T

INFORMATION AND GENERAL TIMETABLE



[1] M. Pissavini, S. Marguerie, A. Dehais, L. Ferrero and L. Zastrow, Characterizing Roughness: A New Substrate to Measure SPF Cosmet. Toiletries, (2009) 9:56-62

