HelioScreen

In Vitro sunscreen testing solutions

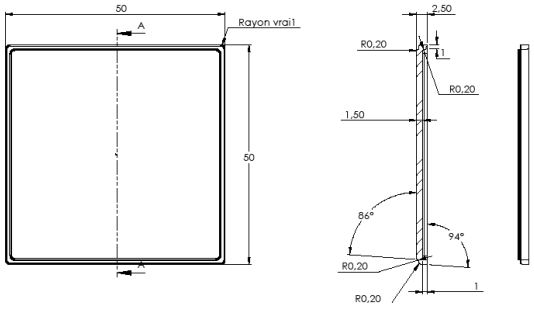
TECHNICAL SHEET

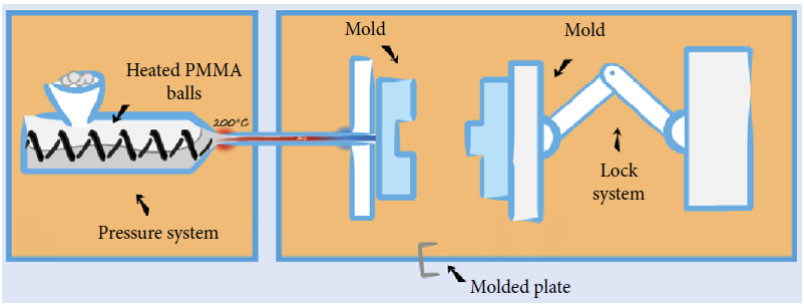
Helioplate HD6

Molded PMMA plate

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 the same topography due to the process and in compliance with ISO 24443:2012, Colipa in vitro UVA rev. 2011, FDA monograph 2011 and Boots Star Rating system rev. 2011.

PROCESS DESCRIPTION

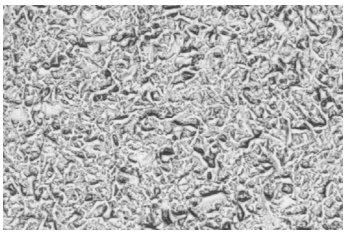




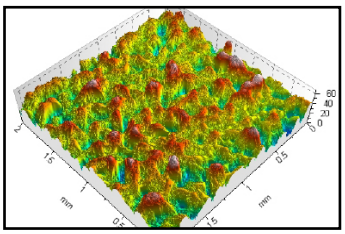
Overall size (WxLxH):	50 mm x 50 mm x 1.5 mm	Spreading area:	48 mm x 48 mm
Weight:	4.5 g	Temperature:	Optimal temperature range 20-40°C
Manufacturing process:	Plate by plate	Material:	PMMA (poly(methyl methacrylate))
Package contenance:	50 plates	Use:	To use only one time (cannot be cleaned)

VIEW

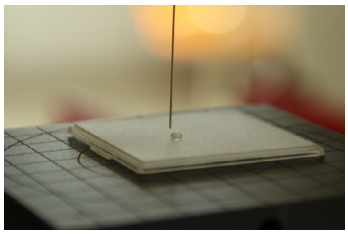
2D



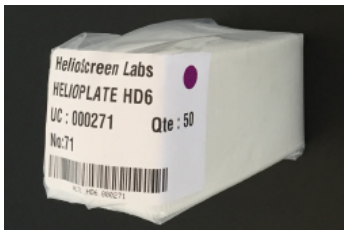
3D



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 um horizontally.

Parameter	Ra	Rv	Rdq	A1	Ssc	Vvv
Target value	4.853	13.042	11.122	239.75	0.033	1.044E-6
Upper limit	5.170	13.669	12.411	284.25	0.046	1.663E-6
Lower limit	4.535	12.414	9.833	195.24	0.020	4.248E-7

Ra: Average arithmetic of the distances in the average

Rv: Maximal depth of the hollows of the profile, inside a basic length

Rdq: Square root of the averages of the gradiant

A1: Area of the equivalent triangle for peaks

Ssc: Curvature averages arithmetic in summits

Vvv: Volume of space of valleys, calculated in the portion situated below c2 This study rests on the curve of Abbott calculated on the surface)

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

Reception of our OF (Order Form) or your Purchase Order (PO).

Order sent

Quality certificate sent upon request (PDF form)

Week 0 — 2 - 4

OF / PO

Tracking number

Certificate

[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

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