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ŁUKASIEWICZ RESEARCH NETWORK INSTITUTE FOR ENGINEERING OF POLYMER MATERIALS AND DYES

87-100 Toruń, Marii Skłodowskiej-Curie 55

Paints and Plastics Center

44-100 Gliwice, Chorzowska 50 A

Research Laboratory of Polymer Plastics

Research report No.GT/214a/2021

Reference No. GT.4130.225.2021

Testing type	Tested subject	Client's name and address
Elasticity modulus in pressure Dimension stability	GP board	

SPECIMEN		TESTS			
Number	Accepted	Started	Completed		
214/20211	31st August 2021	6th September 2021	27th September 2021		

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Specimen Description:

The client provided for testing 3 boards with dimensions of 800mm by 120 mm made of polyvinyl chloride in black color, described as *GP board*.

The sample was assigned with the number 214/2021.

Testing description:

The following tests were performed:

- 1. Determination of the elasticity modulus in stress in accordance with the PN-EN ISO 604: 2006 standard Plastics Determination of compression properties using the following test parameters and conditions:
 - test temperature: 22.6 °C,
 - before testing, the samples were conditioned under the measurement conditions for 24 hours,
 - type of test piece: square with a side of about 50 mm,
 - test pieces were cut by machining,
 - number of test pieces: 5
 - test speed: 1 mm / min,
 - the examination result presents an average value and standard deviation
- 2. Dimensional stability after exposure to increased temperature in accordance with the PN-EN ISO 23999:2018-10 standard Resilient floor coverings Determination of dimensional stability and curling after exposure to heat using the following test parameters and conditions:
 - type of test piece: square with a side of about 240 mm
 - test pieces were cut by machining out of 3 different areas of the tested board,
 - test temperature: (80 ± 2) °C
 - time of heat exposure: 6h
 - number of test pieces: 3
 - the examination result presents maximum dimensional change, mean value and standard deviation

Test results: are compiled in Table 1.

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Table 1 Test results of the sample No. 214/2021

	Test method	Method status*	Unit	Test result		
Tested parameter				Mean	value	Standard deviation
Elasticity modulus in pressure	PN-EN ISO 604:2006	С	MPa	89,1		3,2
Dimenional change after	PN-EN ISO		mm	Max 2,12	0,29	0,81
exposure to heat	23999:2018-10	С	%	Max 1,07	0,3	0,31

Method status /*: C – testing method not covered by the quality management system

End of the report

/Report compiled by, signature/