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TECHNICAL REPORT

Gerflor SAS ZI du Bois des Lots 26130 Saint Paul Trois Chateau France	SATRA reference:	FLO8530T1M5	
		2350	2
	Report ID/Issue number:	35548/1	
	Your reference:		
	Date samples received:	15/12/2023	
	Date(s) work carried out:	15/12/2023 to 20/12/2023	
	Date of report:	17/01/2024	

Testing Requirements

Testing of one product described as "Mipolam Biocontrol Clean"
to EN 16165:2021 Annex C using slider 96 and ≠ Rz measurements.
Assessed in accordance with the ≠ UKSRG Guidelines Issue 5 :2016.

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Report Signed by:

Philip Weal

Report Signatory

TESTING OF ONE PRODUCT DESCRIBED BY THE CUSTOMER AS "MIPOLAM BIOCONTROL CLEAN" TO EN 16165:2021 ANNEX C - USING SLIDER 96 WITH ≠ RZ MEASUREMENTS. ASSESSED IN ACCORDANCE WITH THE ≠ UKSRG GUIDELINES ISSUE 5:2016.

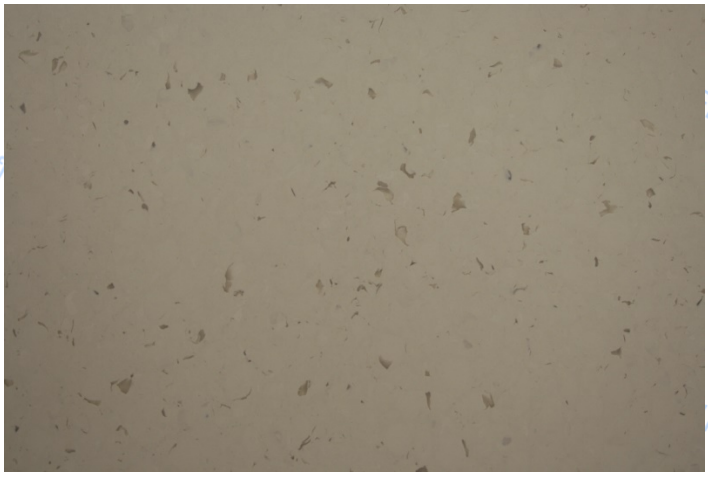
As requested by Gerflor SAS, SATRA has conducted an assessment of the slip resistance of a sample of flooring as detailed below.

CONCLUSION

The product referenced "Mipolam Biocontrol Clean" has demonstrated a low slip potential under wet test conditions in the worst performing direction tested and a low slip potential under dry test conditions in the worst performing direction tested, when tested to EN 16165:2021 Annex C and assessed in accordance with the ≠ UK Slip Resistance Group guidelines, Issue 5:2016.

SAMPLE SUBMITTED

Sample reference: "Mipolam Biocontrol Clean" (1)
Description of surface: Smooth (Embossed)
Appearance:



Date conditioning started: 15 December 2023
Testing completed: 20 December 2023
Testing conducted by: Dusan Pekarovic

TESTS CARRIED OUT

- EN 16165:2021. Determination of slip resistance of pedestrian surfaces – Methods of evaluation - Annex C. Pendulum Test [2,3,4]
- ≠ Surface roughness measurements (Rz) in accordance with ≠ UK Slip Resistance Group Guidelines – Issue 5:2016 [3,5,6]

Note(s):

(1) Information supplied by the customer. Not verified by SATRA.
(2) The samples were conditioned and testing was conducted at (23 ± 2) °C and (50 ± 5) % RH. Surface temperature measured prior to testing was 22.5 °C.
(3) Results have been assessed in accordance with the ≠ UK Slip Resistance Group Guidelines – Issue 5:2016.
(4) The median value is calculated over the final five measurements from a set of eight measurements.
(5) Surface roughness measurements were included at the customer's request.
(6) The surface roughness values have been taken from an area 75mm x 75mm with meter oriented in three directions.

VERIFICATION

Before testing commenced a verification of the pendulum tester was conducted as per EN 16165:2021 Annex C;

Verification as per EN 16165:2021 Annex C (19/12/23)

Verification Readings		1	2	3	4	5	6	7	8	Median[4]
Glass Plate (PVS-1)	WET	7	9	8	8	8	8	7	7	8
Pavigres Tile (PVS-2)		39	38	38	38	38	38	38	37	38
Pink Lapping Film (PVS-3)		68	68	67	66	65	65	65	65	65

Verification requirements from EN 16165:2021 Annex C

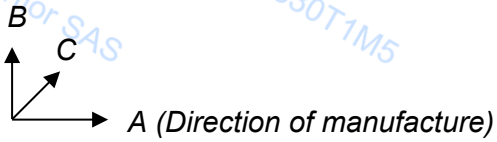
Verification Surface	Assigned value of verification surface (PTV in wet conditions)	Acceptance criteria for verification surface and measured value (PTV in wet conditions) slider 96
Float Glass Plate	8	± 2
Pavigres Tile	38	± 2
Pink Lapping Film	65	± 3

RESULTS

Table 1. EN 16165:2021 Annex C – Pendulum Test. (Using Slider 96)

Sample	Condition	Median[4] slip measurement (PTV_{96})		
		Direction of Test		
		A	B	C
"Mipolam Biocontrol Clean"	Dry	**65**	**65**	**66**
	Wet (water)	**60**	**58**	**61**

Direction of Test



The following table contains the classification guidelines as recommended by the ≠ UK Slip Resistance Group Issue 5:2016.

Table 2. Guidelines for slip potential classifications for PTV, as stated in the UK Slip Resistance Group Guidelines Issue 5:2016.

Slip potential	PTV
High slip potential	0-24
Moderate slip potential	25-35
Low slip potential	36+

RESULTS CONTINUED

≠ Surface Roughness Measurements (Rz)

The surface roughness was measured in accordance with the ≠ UKSRG Guidelines Issue 5:2016.

Table 3. ≠ Surface Roughness measurements (Rz) [3,5,6]

Roughness Measurement	1	2	3	4	5	6	7	8	9	10	Avg RZ
Rz value	17.2	16.6	12.1	15.9	16.1	15.3	14.3	16.3	14.3	14.3	**15.24**

The values achieved for the surface roughness would suggest that the floor covering submitted for testing has a moderate slip potential in the wet conditions, as detailed in Table 4 below.

Table 4. Guidelines for surface roughness classification. Expected slip potential in water-wet conditions. (≠ UK Slip Resistance Group Guidelines Issue 5:2016).

Slip potential	Rz value
High slip potential	Below 10 µm
Moderate slip potential	10 – 20 µm
Low slip potential	20 + µm

It is important to understand that the surface roughness measurements should not be taken in isolation and that the pendulum test results take precedence when assessing slip potential.

'In any complaint involving slip, the floor surface, the footwear and other environmental factors will all have an important bearing on slip resistance. It will be impossible to make either footwear or floorings slip resistant under all conditions which may be encountered in wear'.

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When reporting results against a conformance statement (Pass/Fail or the allocation of a class or level) then uncertainty of measurement is taken into account based on a non-binary acceptance which itself is based on the guard band being equal to the expanded uncertainty.

Where the result corrected for uncertainty falls within the tolerance of the conformance statement then the risk of the conformance statement being a false accept or false reject is up to 2.5% and SATRA will in this instance quote a Pass/Fail, class, or level.

Where the result corrected for uncertainty falls outside of the tolerance of the conformance statement then the risk of the conformance statement being a false accept or false reject is up to 50%. In this instance SATRA will not provide a Pass/Fail statement or a class or level but will include information in the notes in relation to the result obtained.

Where a report contains SATRA guidelines values then uncertainty of measurement values have been taken into account when determining the guideline values and as such are not considered when determining pass/ fail criteria.