SATRA Technology Centre Ltd
Wyndham Way, Telford Way, Kettering,
Northamptonshire, NN16 8SD United Kingdom
Tel: +44 (0) 1536 410000
email: info@satra.com
www.satra.com

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TECHNICAL REPORT

Gerflor SAS ZI du Bois des Lots 26130 Saint Paul Trois Chateau France	SATRA reference:	FLO2013062	
		2441	1
	Report ID/Issue number:	45868/1	
	Your reference:	PO24GERD04243	
	Date samples received:	23/10/2024	
	Date(s) work carried out:	23/10/2024 to 06/11/2024	
	Date of report:	08/11/2024	

Testing Requirements

Testing of one product described by the customer as "TARASAFE H2O"
to EN 16165:2021 Annex C using slider 55/57.
Assessed in accordance with the ≠ UKSRG Guidelines Issue 6:2024.

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Report Signed by:

Philip Weal

Report Signatory

TESTING OF ONE PRODUCT DESCRIBED BY THE CUSTOMER AS "TARASAFE H2O" TO EN 16165:2021 ANNEX C - USING SLIDER 55. ASSESSED IN ACCORDANCE WITH THE ≠ UKSRG GUIDELINES ISSUE 6:2024.

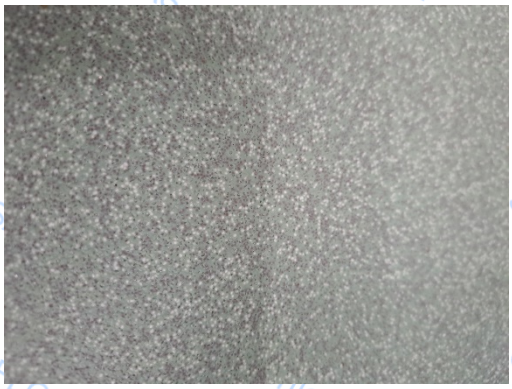
As requested by Gerflor SAS, SATRA has conducted an assessment of the slip resistance of a sample of flooring as detailed below.

CONCLUSION

The product referenced "Tarasafe H2O" 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 6:2024.

SAMPLE SUBMITTED

Sample reference: "Tarasafe H2O" (1)
Description of surface: Smooth (Embossed)
Appearance:



Date conditioning started: 23 October 2024
Testing completed: 06 November 2024
Testing conducted by: Reece Johnson

TESTS CARRIED OUT

- EN 16165:2021. Determination of slip resistance of pedestrian surfaces – Methods of evaluation - Annex C. Pendulum Test [2,3,4,5]

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 23.1 °C.

(3) Results have been assessed in accordance with the ≠ UK Slip Resistance Group Guidelines – Issue 6:2024.

(4) The median value is calculated over the final five measurements from a set of eight measurements.

(5) EN 16165:2021 refers to Slider 57 rubber for testing. However, BS EN 16165:2021 contains a national foreword, which states that as Slider 55 rubber has been used in the UK for several decades, the UK committee considers it to be the preferred alternative to Slider 57 rubber, and as Slider 55 rubber is supplied, is normally within the specification range of Slider 57 rubber. On this basis, SATRA have therefore used Slider 55 for this testing.

VERIFICATION

Before testing commenced a verification of the pendulum tester was conducted as per EN 16165:2021 Annex C; Due to issues determining the verification values on some samples, for use with the Slider 55/57, the pendulum tester has been verified using the Slider 96 rubber.

Verification as per EN 16165:2021 Annex C (06/11/24)

Verification Readings		1	2	3	4	5	6	7	8	Median[4]
Glass Plate (PVS-1)	WET	9	8	7	6	8	7	6	7	7
Pavigres Tile (PVS-2)		37	37	37	36	37	36	37	35	36
Pink Lapping Film (PVS-3)		64	63	63	62	63	62	63	62	62

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	36	± 2
Pink Lapping Film	65	± 3

RESULTS

Table 1. EN 16165:2021 Annex C – Pendulum Test. (Using Slider 55)

Sample	Condition	Corrected Median[4] slip measurement (PTV_{20})		
		Direction of Test		
		A	B	C
"Tarasafe H2O"	Dry	**88**	**91**	**93**
	Wet (water)	**48**	**45**	**44**

See Annex 1.0 for full test results and corrections.

Direction of Test

The following table contains the classification guidelines as recommended by the ≠ UK Slip Resistance Group Issue 6:2024.

Table 2. Guidelines for slip potential classifications for PTV, as stated in the ≠ UK Slip Resistance Group Guidelines Issue 6:2024.

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

'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'.

ANNEX 1.0 – CALCULATION OF CORRECTED PENDULUM TEST VALUE (PTV_{20}).

The measured Pendulum Test Value PTV_t is the median of the last five recorded readings, in each direction tested.

Where Slider 55[5] rubber is being used, then the median can be corrected for rubber temperature (measured ambient temperature), to the reference temperature of 20°C, using the formula below.

$$PTV_{20} = \frac{PTV_t}{1 - [0.0059x(t - 20)]}$$

Last five recorded readings for each direction of sample "Granit Multisafe" tested in accordance with EN 16165:2021, using Slider 55[5]

Test Conditions		Data/Readings					PTV_t (Median)
Dry	A	**88**	**87**	**84**	**85**	**86**	**86**
	B	**90**	**89**	**89**	**90**	**85**	**89**
	C	**92**	**88**	**90**	**92**	**91**	**91**
Wet	A	**49**	**46**	**47**	**45**	**47**	**47**
	B	**45**	**44**	**45**	**43**	**43**	**44**
	C	**43**	**43**	**44**	**43**	**44**	**43**

Test Temperature: 23 °C
Test Humidity: 50 % RH

The correction for this test will therefore be:

$$PTV_{20} = \frac{PTV_t}{1 - [0.0059x(23 - 20)]} = \frac{PTV_t}{0.9823}$$

EN 16165:2021, using Slider 55 - Corrected results

Test Conditions		PTV_{20}	Slip Potential (UKSRG)
Dry	A	88	**Low**
	B	91	
	C	93	
Wet	A	48	**Low**
	B	45	
	C	44	

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Where values for uncertainty of measurement are included within the report then the uncertainty of the corresponding results are based on a standard uncertainty multiplied by a coverage factor k=2, which provides a coverage probability of approximately 95%.

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.

SATRA's guidelines provide recommendations that are based upon SATRA's knowledge and experience. The guidelines are intended to indicate conformance by providing information on the likely performance or characteristics of a property. As such, uncertainty of measurement is not applied when evaluating results against guideline recommendations.