

## SLIP RESISTANCE GRAFIPRINT FLOORPRINT TECHNICAL SERVICE REPORT

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### TESTING

The facestock of the Grafiprint material, referred to as "FLOORPRINT" was tested in accordance with DIN 51130:2010.

As requested by the manufacturer of the facestock, an assessment has been conducted to determine the slip potential of the floor covering, submitted by the ramp method, as detailed below.

### SUMMARY

With regards to the requirements laid out in DIN 51130:2010, the floor sample submitted has demonstrated an average angle of 10.1°, hence being classified as **R10**.

### TESTS CARRIED OUT

DIN 51130:2010 Testing of Floorcoverings – Determination of Slip resistance work rooms and areas of work with an increased risk of slipping – Walking method – Ramp test.

### RESULTS

Test No.	Operator 1 Inclined Platform Shod	Operator 2 Inclined Platform Shod
1	10.2	9.8
2	10.3	10.1
3	10.1	10.2
Mean	<b>10.1</b>	
Rating	<b>R10</b>	

## DISCUSSION

This test measures slip through the use of a human subject, who walks backwards and forwards over contaminated flooring at ever increasing angles of inclination. The resulting angle at which slip occurs classifies the flooring via a rating using a designation such as R9 up to R10.

The test surface is coated with specific viscosity grade oil and is tilted from the horizontal at a rate of one degree per second. Two people perform the test separately with the subject wearing safety footwear and each determine the angle three times; the overall average of the six results is used to categorize the surface with the R rating as detailed below.

### R rating category

R Value	Category Friction is :	Angle of Inclination
R9	Low	6° to 10°
R10	Normal	>10° to 19°
R11	Above Average	>19° to 27°
R12	High	>27° to 35°
R13	Very High	>35°

### Note to end use application

R9 Floors in work rooms and work areas without a high risk of slipping. General and private areas.

R10 to R13 Floors in workrooms and work areas where there is an increased risk of slipping due to grease, oil, water, foods, left-overs, dust, flour, plant clipping, etc.

### Operator Verification results for DIN 51130:2010

#### Operator A

Verification Board	Operator A Verification					
	Test Run			Average	Difference	Proceed?
	1	2	3			
ST – I (11.2 ± 3.6)	10.8	10.9	10.7	10.8	-0.4	Y
ST – II (17.9 ± 3.0)	19.2	19.1	19.3	19.2	+1.3	Y
ST – III (24.9 ± 2.4)	27.0	27.1	27.0	27.0	+2.1	Y

#### Operator B

Verification Board	Operator A Verification					
	Test Run			Average	Difference	Proceed?
	1	2	3			
ST – I (11.2 ± 3.6)	10.9	10.9	11.0	10.9	-0.3	Y
ST – II (17.9 ± 3.0)	19.5	19.3	19.2	19.3	+1.4	Y
ST – III (24.9 ± 2.4)	26.9	27.1	27.1	27.0	+2.1	Y