

### Industrial Research Services

Materials Science & Engineering, Graham Road (PO Box 56), Highett, Victoria, Australia 3190 Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: http://www.cmse.csiro.au

Registered Testing Authority - CSIRO

5 September 2008

Our Ref. EN13 / 1073 03/0212

### **TEST REPORT No. 4530s**

Requested by:	Guardian Tactile Systems Pty Ltd
on (date):	3 September 2008
Manufacturer:	Guardian Tactile Systems Pty Ltd
Product Desc.:	Nose Tread Material - black

Sampling details:	
Where:	Delivered
Date:	4 September 2008
By whom:	Courier
How (methods):	N/A

The results reported relate only to the sample(s) tested and the information received. No responsibility is taken for the accuracy of the sampling unless it is done under our own supervision. CSIRO cannot accept responsibility for deviations in the manufactured quality and performance of the product. While CSIRO takes care in preparing the reports it provides to clients, it does not warrant that the information in this particular report will be free of errors or omissions or that it will be suitable for the client's purposes. CSIRO will not be responsible for the results of any actions taken by the client or any other person on the basis of the information contained in the report or any opinions expressed in it. The reproduction of this test report is only authorised in the form of a complete photographic facsimile. Our written approval is necessary for any partial reproduction.

This test report consists of 3 pages

	SUMMARY OF SLIP RESISTANCE TESTS PERFORM	IED:	
		Result	Class
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials		
	Appendix A: WET Pendulum (Four S slider):		
	Mean BPN:	80	V [HIGH*]
* = CSIRO classification			

In order to interpret the classifications, please refer to Standards Australia Handbook 197, An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials, which recommends minimum classifications for a wide variety of locations.

It is important to realise that test results obtained on unused factory-fresh samples may not be directly applicable in service, where proprietary surface coatings, contamination, wear and subsequent cleaning all influence the behaviour of the pedestrian surface.



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### SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

#### WET PENDULUM TEST METHOD

	RIED OUT IN / 86:2004 (Appe		ICE WITH			Test Date: 4	September 2008	
RESULTS:	Location:	Slip Resistance Laboratory				Rubber slider used: Four S		
	Sample: Cleaning: Temperature:	Unfixed Deionized v 23°C	water			Conditioned w	ith grade P400 paper, dry	
	Friction Tester: cted by: Gerald		nley (S/N:	0312, calib	rated 01/03	8/07)		
		Specimer						
		1	2	3	4	5		
Last 3 s	swings	80 79 79	81 80 81	80 80 79	79 79 79	81 81 80		
Average	es	79	81	80	79	81		
					Ме	an BPN :	80	
					CL	ASS :	V [HIGH*]	
* = CSIRO c	lassification					O		



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Date and Place

5 September 2008, Highett, Vic

Name, Title and Digital Signature:

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**GERALD FISHER** Laboratory Technician Tel: 61 3 92526414 Fax: 61 3 92526244 Email: Gerald.Fisher@csiro.au

#### \*CSIRO recommended classification of Slip Resistance as determined from: AS/NZS 4586: 2004 Slip Resistance Classification of New Pedestrian Surface Materials (Appendices A & D).

Wet Pendulum Class	BPN 4S Rubber	CSIRO Class LOW	CSIRO Class MEDIUM	CSIRO Class HIGH
V	>54	54-57	58-61	>61
W	45-54	45-48	49-51	52-54
Х	35-44	35-38	39-41	42-44
Y	25-34	25-28	29-31	32-34
Z	<25	<18	18-21	22-25
Oil Wet Ramp Class	Angle (degrees)	CSIRO Class LOW	CSIRO Class MEDIUM	CSIRO Class HIGH
R9	≥6 to <10	≥6 to 7.5	7.6 to 9	9.1 to 9.9
R10	≥10 to <19	≥10 to 12	12.1 to 15	15.1 to 18.9
R11	≥19 to <27	≥19 to 21	21.1 to 24	24.1 to 26.9
R12	≥27 to <35	≥27 to 29	29.1 to 32	32.1 to 34.9
R13	>35	>35 to 36	36.1 to 38	>38.1

AS/NZS 4586 Slip Resistance Classification of New Pedestrian Surface Materials (Appendices A & D).

CSIRO has categorized the AS4586 classifications into sub-groups Low, Medium & High. The slip resistance test classification is still determined according to AS 4586 Australian Standard (Appendices A & D). The added information of Low, Medium and High allows professionals to make a better judgement of pedestrian floor requirements.