## **Certificate of Test**



For	Unitika Limited	0248
FOF	4-1-3 Kyutaro-Machi	
	Chuo-ku	
	Osaka	
	Japan	
	541-8566	
	Our reference SPO	70216971/1331
		nd August 2013
		ia magast 2015
Product	Retro-reflective material referenced Unitika Sparklite Flame Retardant Film	MR-3591S
Trouuct	Redo-reflective material referenced omtika Sparkine Flame Retardant Finn	WIK-55715
Test Data	EN ISO 20471:2013 requirements clauses:-	
	6.1 Table 4	DAGG
	Retro-reflective performance of new material	PASS
	6.2 Table 6 – retro-reflective performance after test exposure Abrasion	DACC
		PASS PASS
	Flexing Folding at cold temperature	PASS 6
	Temperature variation	PASS PASS
	Domestic washing @ 60°C & 70°C tumble dry(ISO 6330 - 50 cycles)	PASS
	Industrial wash @ 75°C & 90°C tumble dry(ISO 550 - 50 cycles)	PASS 0
	Industrial wash @ 75°C & cabinet drying at 160°C (ISO 15797 - 50 cycles)	PASS PASS
	Dry cleaning, normal (ISO 3175 - 25 normal cycles)	PASS
	Influence of rainfall	PASS
	Flammability performance	I A55
	EN469:2005, Clause 6.1, Annex B.3.2 (as received)	PASS
		PASS PASS
	EN469:2005, Clause 6.1, Annex B.3.2 (wash 75°C 12 cycles) EN469:2005, Clause 6.5, Annex B.3.1	PASS PASS
	EN469:2005, Clause 6.5, Annex B.3.1 BS EN ISO 14116:2008 Limited Flame Spread - Index 3	PASS PASS
	Do EN 180 14110:2008 Linneu Flame Spreau - Index 5	I ASS

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**FRA** 

TECHNOLOGY

Description	Retro-reflective separate performance material	
Recommendations	The following test report provides full details of test data:	
	SPC0216971/1331, SPC0209130/1245/4, SPC0205769/1228	
Report date	Tests marked † fall outside the UKAS Accreditation Schedule for SATRA. All interpretations are outside the scope of UKAS	SIGNATURE
22nd August 2013	Accreditation and are based on SATRA experience. This report is designed to indicate the performance of the sample tested by SATRA. SATRA have not approved the on-going quality control. It is the responsibility of purchasers to satisfy themselves that other production batches perform similarly.	M Gamble PPE Technologist Safety Products Centre

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