Certificate of Test





For Unitika Limited

4-1-3 Kyutaro-Machi

Chuo-ku Osaka Japan 541-8566

Our reference SPC0220607/1350/1/1 Date 6th February 2014

Product

Retro-reflective material referenced Unitika Sparklite MR-831S

Test Data EN ISO 20471:2013 requirements clauses:-

> 6.1 Table 4

> > Retro-reflective performance of new material **PASS**

Table 6 – retro-reflective performance after test exposure

Abrasion PASS Flexing PASS PASS Folding at cold temperature **Temperature variation PASS** Domestic washing at 60°C (ISO 6330 - 100 cycles) **PASS** Domestic washing at 92°C (ISO 6330 - 20 cycles) **PASS** Industrial washing at 75°C & 90°C tumble dry (ISO 15797 - 50 cycles) **PASS** Industrial washing at 75°C & finishing 160°C (ISO 15797 - 50 cycles) **PASS** Dry cleaning, normal (ISO 3175 - 50 cycles) **PASS Influence of rainfall PASS**

Description Retro-reflective separate performance material

Recommendations The following test reports provide full details of test data:

SPC0200088/09, SPC0216971/1331/25/3, SPC0220607/1350/1/1.

Report date

Tests marked † fall outside the UKAS Accreditation Schedule for SATRA. All interpretations are outside the scope of UKAS Accreditation and are based on SATRA experience.

This report is designed to indicate the performance of the sample tested by SATRA. 6th Feb. 2014 SATRA have not approved the on-going quality control. It is the responsibility of purchasers to satisfy themselves that other production batches perform similarly.

SIGNATURE

M Gamble PPE Technologist Safety Products Centre

SATRA Technology Centre, Wyndham Way, Telford Way, Kettering, Northamptonshire, NN16 8SD, United Karedom Tel: +44 (0) 1536 410000 Fax: +44 (0) 1536 410626 email: <u>info@satra.co.uk</u> Website: <u>www.satra</u>