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Report
on the testing of the electrostatic properties of a textile filter material Type PX500SPS

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Client: Andrew Webron Ltd
Hareholme Mill
Barcup Road
Lacashire
BB4 7 JL
United Kingdom

Responsible: Dr. Carsten Blum

Reference: 09EXAM 10555 BVS-BI

Bochum, 08 September 2009

DEKRA EXAM GmbH

(Dr. Hübner) (Dr. Blum)

This report consists of 3 pages and may only be published unchanged.

1. Subject: Filter fabric

2. Type description: PX500SPS

3. Manufacturer/client: Andrew Webron Ltd, United Kingdom

4. Test documents: 1.) test order of 1 September 2009
2.) test sample

5. Assessment

To determine the electrostatic chargeability, the sample was tested according to DIN 54345 Parts 1 and 5.

Test according to DIN 54345-1

Surface resistance R_{OT} (geometric median of the values of five measurements each):

Side 1: $R_{OT} \approx 1{,}4 \cdot 10^3\ \Omega$, Side 2: $R_{OT} \approx 1{,}4 \cdot 10^3\ \Omega$.

Volume resistance R_{DT} (geometric median of the values of five measurements each):

$$R_{DT} < 1 \cdot 10^3\ \Omega.$$

Due to the low resistance values, some measurements (four of five) of the surface resistance R_{OT} of side 1 were carried out with a reduced measuring voltage of 10 V.

Test according to DIN 54345-5

Strip resistance R_{st} in longitudinal (warp) direction (arithmetic median of five samples):

$$R_{st30} \approx 2 \cdot 10^6\ \Omega.$$

Strip resistance R_{st} in transverse (weft) direction (arithmetic median of five samples):

$$R_{st30} \approx 3{,}1 \cdot 10^3\ \Omega.$$

Deviating from the provisions made in DIN 54 345, the test was conducted after at least 24 hours of storage in normal climate according to DIN 50 014 -23/50-2 at a temperature of 23 °C and a relative humidity of 50 %.

The maximum permissible resistance value is: $10^8\ \Omega$.

This value was under-run in all measurements.

6. Evaluation

In an electrostatic sense, there is no objection to using the earthed filter material in hazardous places.

Bochum, 8 September 2009

Responsible

C. Blum

(Dr. Blum)