

Institut für Energie- und  
Umwelttechnik e.V. (IUTA)  
Air Quality & Filtration  
Bliersheimer Straße 58 - 60  
47229 Duisburg  
Germany



## - IUTA-CERTIFICATE - **Validation of compressed air filters according to ISO 12500-3:2009<sup>1) 2)</sup>**

**(Filters for compressed air – Test methods – Particulates)**

- 1) According to the state of the art in particle measurement technology via online optical aerosol spectrometry particle sizes < 0.14 µm cannot be detected under pressure.
- 2) Particle size range: (0.19 – 2.74) µm

**Customer:** Airfilter Engineering (M) Sdn. Bhd. No. 20, Jalan Anggerik Mokara 31/47,  
Kota Kemuning, 40460 Shah Alam, Selangor, Malaysia

**Tested product:** **Grade U**

IUTA test report: LrF 34/14

Tested cartridge: Single measurement of three cartridges model Grade U

<b>Test parameter</b>					
Inlet pressure	7 bar (e) [8 bar (a)]				
Air flow	50 Nm <sup>3</sup> /h = 100 % nominal flow rate				
Flow direction	from inside to outside				
Test aerosol	DEHS				
Particle size range	(0.19 – 2.74) µm				
Aerosol spectrometer	PCS 1200 (Palas GmbH)				
<b>Test results</b>					
Particle diameter [µm]	lower upper	0.19 0.24	0.24 0.36	0.36 0.52	0.52 0.81
<b>Average efficiency [%]</b>		<b>99.998</b>	<b>99.9989</b>	<b>99.9998</b>	<b>99.99998</b>

Remark: The product was tested under the designation "Grade U"

\* Averages were calculated from the data shown in the test report (mean values of 3 tests in filter housing model "BB141033").

Duisburg, 20<sup>th</sup> August 2014

\_\_\_\_\_  
Managing Director

\_\_\_\_\_  
1.17. W. Hertel  
\_\_\_\_\_  
Department Head