

.DQ 07\_00-12

**CERTIFICATE OF QUALITY**  
**No. C8 – 5 / 2017**

**CHARCOAL SAMPLING TUBES**

Characteristics	Value
Type of the sorbent tubes	Adsorbent tubes Charcoal 8 x 110
Catalogue No.	ST 01-02
Lot #	0870
Expiration date	05.2022
<b>Design parameters</b>	
Overall length of the glass tube, mm	110 ± 2
Outside diameter, mm	8.0 ± 0.2
Internal diameter, mm	6.0 ± 0.2
Thickness of the glass wall, mm	0.7 ± 0.05
Diameter of the tips, mm	2.0 ± 0.3
Length of the backup sorbent layer, mm	14.0 ± 1.5
Weight of the backup sorbent layer, mg	200 ± 10
Polyurethane foam separator, mm	6.0 ± 0.2
Length of the sorbent layer, mm	29 ± 3
Weight of the sorbent layer, mg	400 ± 40
Glass wool packing, mg	15 ± 2
<b>Characteristics of materials</b>	
Glass tubes	Neutral glass for use in the medicine
Polyurethane foam	60 kg.m <sup>-3</sup>
Type of glass wool	Silanized
Diameter of the glass wool fibres, µm	16 ± 2
Filling material	Coconut Charcoal
Particle size distribution:	
Up to 100 µm	2.5 %
From 100 to 250 µm	6.5 %
From 250 to 1100 µm	86.0 %
Above 1100 µm	4.5 %
Metal clamp	Stainless Steel Wire 0.3 mm diam.
<b>Sampling parameters</b>	
Pressure drop at flow rate 150 cc/min, mm H <sub>2</sub> O	48 ± 6
Adsorption capacity toward toluene, not less than	250 mg
Desorption efficiency by carbon disulphide	98.0 ± 2 %

Sofia, 2017

Produce Manager: .....  
/Eng.-Chem. J. Vasileva/

