SHIFT FILTRATION V3.0

TECHNICAL DATA SHEET

According to Good Manufacturing Practice (CGMP) standards

GRADE: QF1
DESCRIPTION: QUARTZ MICROFIBER FILTERS
DATE: MAY 2015

This document is to verify that the designated product has been manufactured in conformance with applicable Current Good Manufacturing Practice (cGMP) standards.
The quality control data given in this document represent the quality of the released lot. These values are the basis for the official release of this material. The Quality Department for quality control of filters has measured the values and assures that they are within the limits that are established in the current specification for this material. The values stated do not represent any internal or external specification for this particular material. This product has passed external-house tests and thus meets **GVS** Group **stringent quality control standards. The following is checkedon a regular basis:**

Glass Microfiber Characterization

PACKAGING: Boxes of 100 units
FORMAT: Circles (Ø mm) 21, 25, 37, 42, 47, 50, 55, 70, 80, 90, 100, 110, 125, 150, 185, 240, 270, 293, 320
Sheets (mm) 203x254

TECHNICAL SPECIFICATIONS
Binders ..... **Binder-free**
Basis weight ..... **85 g /m²**
Thickness ..... **0.44 mm**
Maximum temperature: ..... **900 °C**
Retention range ..... 0.7 µm
Pressure DROP..... **51.5 mbar**
Retention efficiency..... 99.998%

Other Specifications

Features	Made of pure quartz microfibers without binders and any kind of additives. Temperature resistant up to 900ºC
Retention	Excellent retention levels for very fine particles on account of the adsorption mechanisms of the quartz fibers.
Permeability to the air	Very high, enabling large volumes of air to pass through, thus they are appropirate for use in high-volume intakes.
Temperature stability	Their temperature stability is higher than the glass microfiber filters. It is very good up to 900 °C, with some loss of their ususal properties in beyond that point.
Chemical stability	Excellent stability with practically no filter-mass losses thorugh chemical reactions under extreme conditions with the presence of acid gases (HCl, SO_2, SO_3, NO and NO_3).