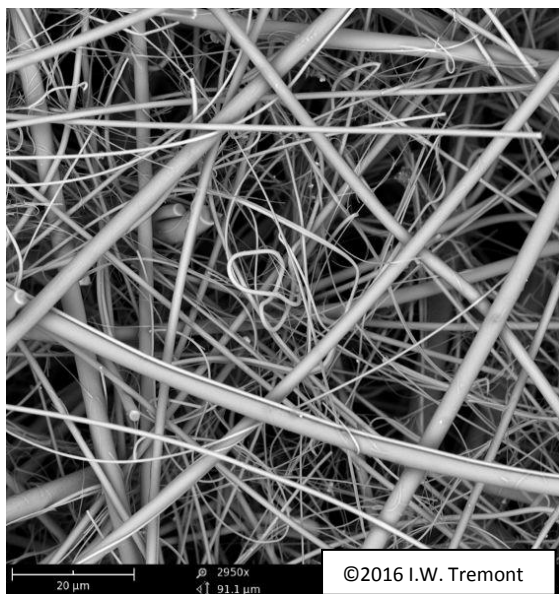


*Imagine the precise retention of a surface membrane combined with the high loading capacity of a fibrous filter...*

*It now exists with  
**Grade A83 NanoGf™***



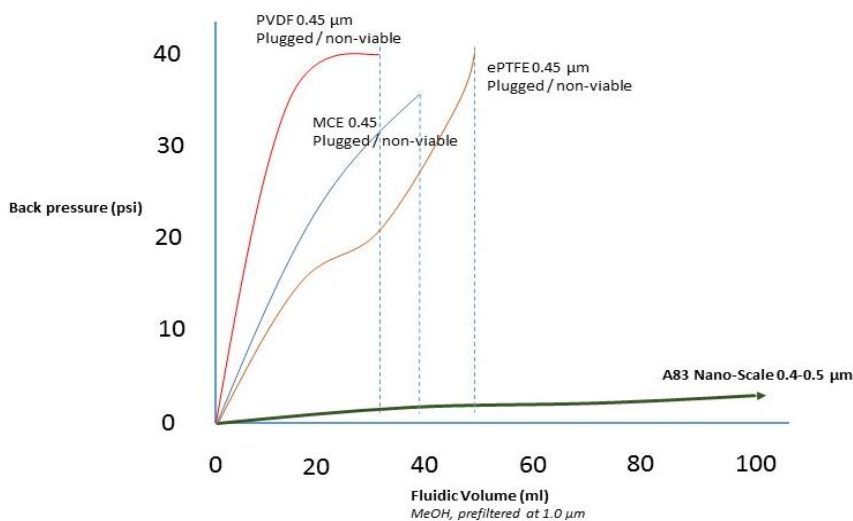
## NanoGf™ glass microfiber filter – Grade A83

This new grade has a particle retention of 0.5µm. It has >20x loading capacity of an equivalent porosity MCE, CN, ePTFE or PVDF membrane and >15x the flow rate.

Back pressure is nearly non-existent in comparison to surface membranes.

Chemically inert, pure binderless borosilicate glass with no sizing additives or other surfactants. Low background noise in LC/GC/MS and very low extractables in presence of aggressive solvents.

- Hydrophilic for both aqueous and solvent applications.
- Extremely high surface area with single fiber chemistry – no supplemental materials or metals.
- Excellent protein recoveries
- Reduces operator fatigue in syringe filter and manual devices.
- Safer operation – reduces possibility of side burst / blow out.
- Reduces cost – Increases column life & uses fewer filters
- Available in any of our standard pressure configurations: 15mm, 25mm & 50mm in-line

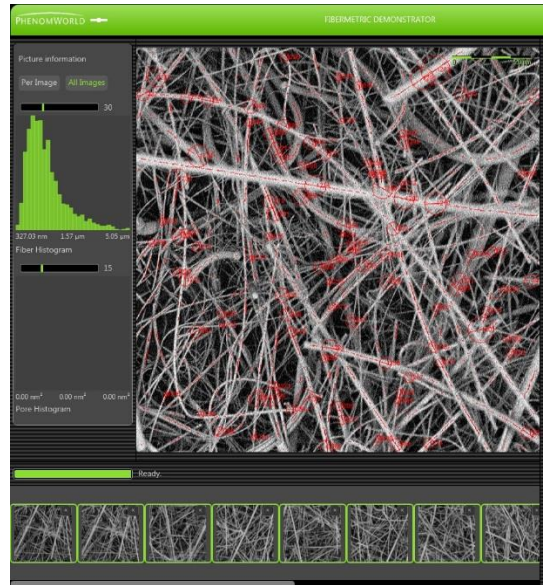
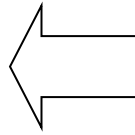
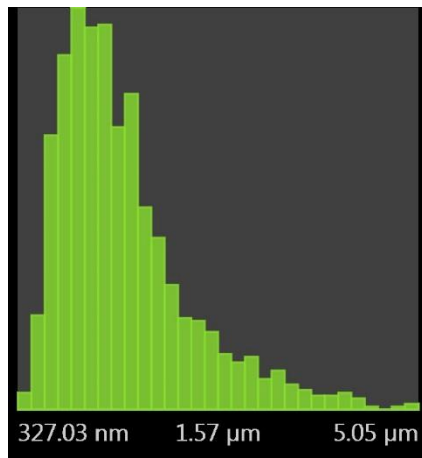


Comparison of **25mm dia.** syringe filter back pressure over fluidic volume for HPLC application

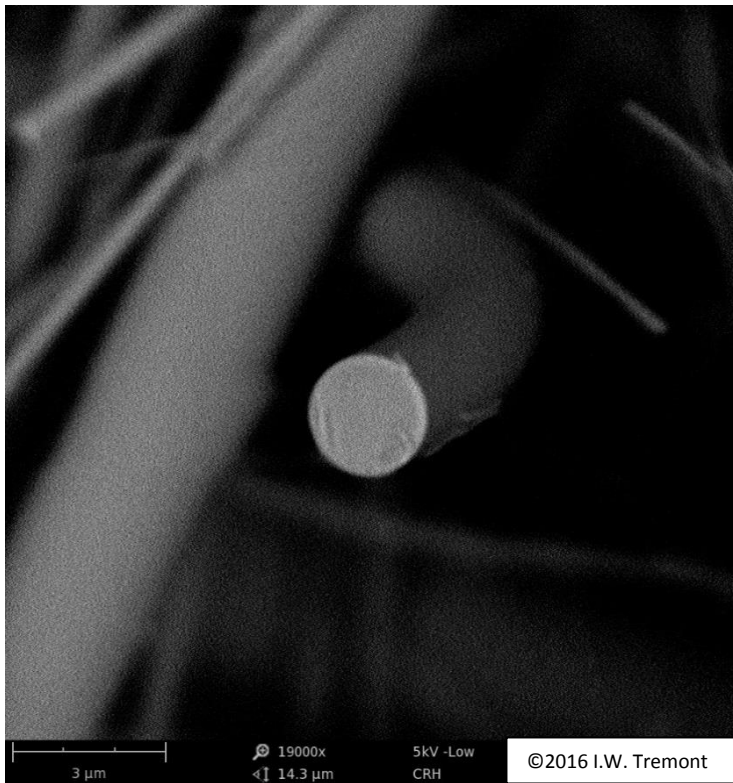


There are many filter materials which make the claim of “nano-scale” fiber, but Grade A83 is tested by an independent laboratory using the latest in fiber analysis and SEM image quantification.

With >85% of the fiber content between 300nm -600nm, this material is truly one of the highest surface area binderless glass microfiber products on the market today.



Fiber analysis conducted utilizing the latest Phenom SEM fiber Analysis Software.



Shown here, one of the largest diameter fibers in this grade illustrates a smooth sheath and uniform fiber geometry.

The smooth sheath of the glass fiber allows tight consolidation into a highly retentive filter mat.

This grade is highly consistent from lot to lot and similarly uniform in thickness and mass to other well-known Tremont grades such as Grade C or E.

High protein affinity and highly washable for separation recovery.

Excellent as a pre-filter for micro-porous membranes such as polymeric structures, track etched polycarbonates and other monolithic membrane materials.

Much wider degree of heat tolerance than any other polymeric membrane. Usable temperature to 500° C.

Chemically stable in presence of all acids with exception of hydrofluoric acid.

*This unique new material is now available as rolls, reels, sheets, disks and custom OEM component parts.*

Ver. 3a, supersedes all other ver and copy.  
© 2020, I.W. Tremont Co., Inc.