



303 Najoles Rd. Suite 112 Millersville, MD 21108

KDF Reticulated Foam



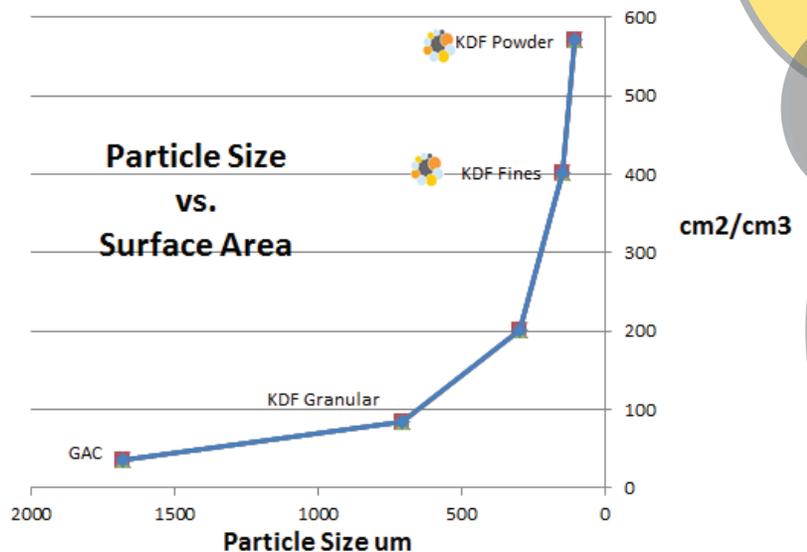
Featured Contaminant Selectivity

-  **Chlorine**
-  **Bacteria**
-  **Heavy Metals**
-  **Algae**
-  **Scale**

KDF 55 Medium was designed specifically for removing or reducing chlorine and water-soluble heavy metals. It controls scale, bacteria and algae, even in hot water. KDF Granular medias tend to pack and channel due to the nature of the filtration mechanism. KDF also requires frequent backwashing at high flow rates when used in tank systems. **Foamulations Reticulated KDF medias solve all of the standard issues with granular use.** Cubes can be used in tank systems with or without backwashing. Discs can be used in cartridges and eliminate granular handling, packing and pressure drop. Other shapes and sizes can allow KDF to be used in ways not possible with granular media. KDF reticulated medias also have a significantly lower weight than granular, so shipping and handling costs can decrease.

Foamulations Increased Efficiency

Foamulations' reticulated medias outperform the same medias in granular form because of chemical kinetics and the Collision Theory. This is accomplished by the size of the particle and the reticulated structure which causes a torturous path for the influent gas or liquid solution. The law of mass action states that the speed of a chemical reaction is proportional to the quantity of the reacting substances. In the case of Foamulations' medias it is the quantity of readily available surface area. Graph F1 shows as the particles decrease in size the surface area increases exponentially. In relation to Collision Theory the more collisions created the higher percentage of chemical reactions. The reticulated structure assures the influent stream will see many collisions with the most efficient particle possible.



Graph F1

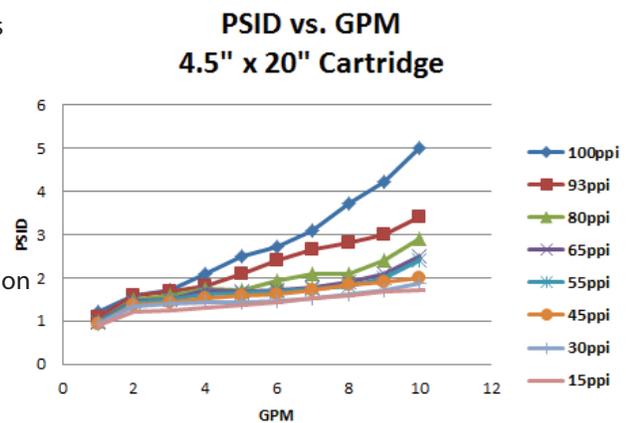
Model Loadings and Capacities

Model	Housing	Pore Size	Media	Loading	Granular Equivalent	Gallon Capacity
K53D75-35	Slim Line(2.5D)	30ppi	KDF Powder	.30Ounces/Cu.In.	1/2 LB	6,000g
K54D75-35	Big Blue (4.5D)	30ppi	KDF Powder	.30Ounces/Cu.In.	1 LB	10,000g
K5-1CUBE	Tank,Sump.....	15ppi	KDF Fines	.45Ounces/Cu.In.	1LBCubes = 4.5LBGranular	42,750g
K51.25D2.5-15	Radial Core	15ppi	KDF Fines	.45Ounces/Cu.In.	1/4 LB	3,000g
K58X10X8	2.5Dx10" Wrap	40ppi	KDF Powder	.38Ounces/Cu.In.	7/8 LB	8,750g
K54D1-15	Spa Skimmer	15ppi	KDF Fines	.45Ounces/Cu.In.	N/A	400g 3-5Months
K52D6-15	Spa Radial Core	15ppi	KDF Fines	.45Ounces/Cu.In.	N/A	400g 3-5Months
K56D2-15	Pool Skimmer	15ppi	KDF Fines	.45Ounces/Cu.In.	N/A	15,000g 3-5Months

Foamulations KDF 55 Reticulated Medias have between .25-.45ounces/Cu.In. depending on the particle size and porosity. All of the KDF 55 Reticulated medias are rated for 950g/Cu.In. in standard single pass filtration scenarios. There are many KDF products that are not included in this chart. For more information contact your Foamulations representative today. www.foamulations.biz

Foamulations Pressure Differential

One of the main benefits of Foamulations' reticulated medias is the lack of PSID (pressure differential) over standard filtration cartridges. Most 4.5" diameter filtration cartridges max out at approximately 4-5gpm. Foamulations' cartridges have been pushed upwards of 10gpm and still show lower PSID than all other filtration cartridges. Foamulations cartridges also filter axially so the influent sees a much larger bed depth than that of comparable radially flown cartridges. The reticulated structure can also act as a separation or dispersion layer which will help to decrease the overall PSID even when used in conjunction with granular medias. Graphs are available to show how using Foamulations' reticulated media as a dispersion or separation layer can improve the overall PSID. Graph F2 shows the PSID in a standard 4.5" x 20" cartridge for the various PPI (pore per inch) or density of reticulated medias available. The 5D media is typically manufactured at 100ppi.



Graph F2

Foamulations can shape, size and cut medias to fit directly in your current housing or we can aid in the development of a housing which will help our media function in the most efficient manor. Foamulations' reticulated media can be used in gravity situations and high or low pressure situations. Contact a Foamulations engineer today to help with your next filtration project.

KDF Reticulated Foam is WQA tested and certified to NSF/ANSI 61 for materials safety only. See www.wqa.org for conditioning and use restrictions.



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