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With proper use, cellulose fiber is a highly effective filtration media

Figuring Out Fiber

Cellulose fiber is gaining popularity as a filtration media for use in septum-type (D.E.) filters, and as a filter aid in cartridge and sand filters. Many enjoy its exceptional filtration abilities, and it's also efficient in vacuum-type filters. In addition, cellulose fiber is a nontoxic, biodegradable, renewable resource, which wins favor with the public's escalating "green" consciousness.

While there are many advantages in using cellulose fiber media, there are several differences that users must be aware of. Here are a few things to consider when using cellulose fiber filtration media.

Sequestrates and flocculants

Because of the smaller micron filtration characteristics of cellulose fiber, it will naturally reduce algae spores, phosphates, suspended metals and similar impurities in pool and spa water.

Synthetic polymer flocculation agents, usually called clarifiers or phosphate removers, were originally produced to aid in the removal of these smaller particulates from water filtered by cartridge or sand filters. Cartridge filters usually remove particles from 10-to 20 microns, depending on the media. Sand, on the

Self-sufficient: **Because it already sifts very small particles, cellulose fiber need not be combined with flocculants or sequestrates, which can decrease water flow through the cellulose fiber filter to unacceptable levels.**

other hand, removes particles from 30- or 40 microns. Flocculants or sequestrates aid in the filtration effectiveness of those filters by prematurely "loading" the media to affect smaller micron filtration.

These helpers are not recommended for filters using cellulose fiber because it already naturally filters much smaller particles, in some cases down to 2 microns. The sequestering chemicals can quickly reduce water flow in cellulose fiber filters below acceptable limits, and will cause a rapid increase in filter pressure. If these chemicals are used in cellulose fiber filters, a grey jelly-like film will form on the filter grids, blocking water flow and severely reducing the filter's effectiveness. In addition, the use of these chemicals will often cause the cellulose fiber to cling to the filter grids or cartridge, which serves to impede the backwashing/cleaning process. Under normal circumstances, cellulose fiber will backwash completely from the filter much more quickly than traditional media.

Mixing with D.E.

Pool operators should be aware that cellulose fiber is never to be mixed with Diatomaceous Earth filtration media. The two materials are not compatible and, if combined, will severely restrict water flow and raise filter pressure.

Before switching to cellulose fiber, the filter should be split and the grids or cartridge thoroughly cleaned. The fiber then can be introduced into the filter through the pool skimmer as usual.

Overloading the filter

Always refer to the loading instructions on the cellulose fiber bag and use the product accordingly. Operators often overload filters with the product because they are skeptical of the comparatively small amounts called for by the instructions. Because it is so much lighter than traditional media, cellulose fiber will coat the grids using much less product. Overloading the filter will cause "bridging" between the grids and filter shell, negatively impacting its efficiency. It will also cause premature high pressures in the filter, calling for more frequent and less complete backwashes. All of those problems can be avoided easily by using the recommended amount of fiber. ■

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