Mike-o-Pedia – Activated Carbon_Which_Type_To_Use

September 2017

Product: Activated Carbon

Which type of carbon do I use? (*This should be in a chart form too)*

- Hydrogen Sulfide (H_2SO_4)
  - Use Catalytic Carbon only in a single tank with peroxide – download article here Applying Peroxide
  - In presence of sulfur reducing bacteria (black slime) treat with chlorine and KDF cubes.
- Chlorine
  - Use any carbon for chlorine removal. It is a chemical reaction is on the surface of the carbon similar to ion exchange.
  - Backwashing extends the life by removing sediment from the carbon bed.
  - Rebed or change out the activated carbon when black particles or gray water is seen in standing water – such as toilet bowls; or when there is increased pressure drop across the carbon bed.
- Tannins
  - Except to polish after primary treatment activated carbon is not recommended for tannin removal.
- VOC (Volatile Organic Contaminants)
  - **Caution – there are too many variables contact the Urbans Aqua for help.**
- POS POA PFOA
  - Only coal based carbon should be used.
  - Dual tank operation – worker / guard with sample port between and after.
  - Strongly recommend use of a totalizing meter after guard tank.
  - Download paper here
- Taste and Odor
  - Any carbon will work.
- Pre-treatment to RO
  - Coconut base carbon is physically harder and produces very little fines.
- High Purity Applications
  - Acid Washed Carbon removes dissolved, naturally occurring metals.

Hydrogen Sulfide Rotten Egg Odor	**Catalytic Carbon**	**Treat with hydrogen peroxide**
Chlorine	**Any Activated Carbon**	**Higher density type last longest**
Chloramine	**Catalytic Carbon**	**Treat with hydrogen peroxide**
VOC Volatile Organic Contaminants	**Consult UA**	**Too many types**
PFC PFS POA PFOA	**Coal 12x40**	**F-600 is best followed by F-400**
Taste and Odor	**Any General-purpose carbon**	
Pre-treatment to RO	**Coconut Base**	**High hardness fewer fines**
Hemodialysis	**CPG-LF; HPC Duper HD 12x40**	**Must be certified by AAMI**
High purity applications	**Consult UA**	