



PHYSICAL PROPERTIES

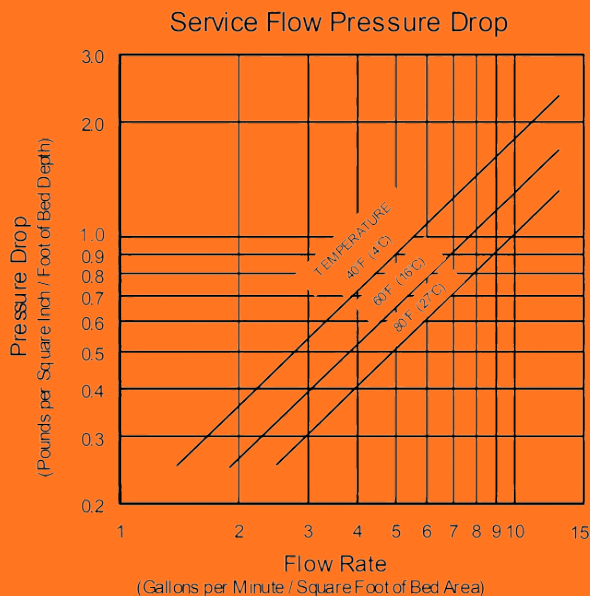
- Color: Black
- Density: 1500 kg/m³
- Specific Gravity: 2.5-2.7
- Effective Size: 0.40-0.20 mm
- Uniform Coefficient: 1.6
- Mesh Size: 16-60
- pH: 4-5
- Removal Iron (10ml/1000ppm): 0.50-0.53 ppm

Manganese Greensand reduce iron, manganese and hydrogen sulfide from water through oxidation and filtration. Soluble iron and manganese are oxidized and precipitated by contact with higher oxides of manganese on the greensand granules. The hydrogen sulfide is reduced by oxidation to an insoluble sulfur precipitate.

Precipitates are then filtered and removed by backwashing. Greensand bed is exhausted, the bed has to be regenerated with a weak potassium permanganate (KMnO₄) solution.

CONDITIONS FOR OPERATION

- Water pH range: 6.2-8.5
- Maximum water temperature: 80°F/26.7°C
- Bed depth: 30 in.
- Freeboard: 50% of bed depth (min.)
- Regeneration: 1.5-2 oz of KMnO₄ by weight per cu. ft.
- Service flow rate: 3-5 gpm/sq. ft., 8-10 gpm/sq. ft. intermittent flow possible
- Backwash flow rate: 10-12 gpm/sq. ft.
- Backwash bed expansion: 40% of bed depth (min.)
- Maximum practical limit of iron (Fe⁺⁺) or manganese (Mn⁺⁺) in raw water: 15 ppm
- Maximum practical limit of hydrogen sulfide (H₂S): 5 ppm



PACKING

- 25 liter/bag (32kgs)