

MANGANESE GREENSAND

Manganese Greensand is formulated from a glauconite greensand and is capable of reducing iron, manganese and hydrogen sulphide 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 sulphide is reduced by oxidation to an insoluble sulphur precipitate. Precipitates are then filtered and removed by backwashing. When the oxidizing capacity power of the Manganese Greensand bed is exhausted, the bed has to be regenerated with a weak potassium permanganate (KMnO₄) solution thus restoring the oxidizing capacity of the bed.



Conditions for Operation

Bed depth: 28-34 inches

Freeboard: 30% of bed depth (min.)

Backwash flow rate: 8-10 gpm/sq.ft.

Backwash bed expansion: 30% of bed depth

Service flow rate:

3-5 gpm/sq.ft., 8-10 gpm/sq.ft

Ph Range: 6.2 – 8.5

Regeneration : 60 gms of KMnO₄ by weight per cft

Physical Properties

Color: Black

Moisture %: < 1

Acid Solubility: < 1 %

Specific Gravity: 2.00

Hardness Mohs: 5

Uniform Coefficients: < 1.7

Bulk Density, Kg/M³: 1325

Effective Size: 0.45 – 0.70 mm

Removal Capacity: Fe 25 ppm

Packaging : 25 / 38 Kgs HDPE Bag