

## Manganese Greensand

PHYSICAL CHARACTERISTICS	
Physical Form	Black, nodular granules shipped in a dry form
Apparent density	85 pounds per cubic foot net
Shipping weight	87 pounds per cubic foot net
Specific gravity	Approximately 2.4
Screen grading (dry)	18 x 60 mesh
Effective size	0.30 to 0.35 mm
Uniformity coefficient	Less than 1.60
pH range	6.2 to 8.5
Maximum temperature	Above 80°F, contact manufacturer
Maximum pressure drop	8 to 10 psi
Backwash rate	Minimum 12 gpm/ft. <sup>2</sup> at 55°F
Service flow rate	2 to 5 pgm/ft. <sup>2</sup>
Minimum bed depth	24 inches (15 - 18 inches of each media for dual media beds)

A visual examination of a dried sample of Manganese Greensand is usually sufficient to determine whether or not the sample is suitable for use.

Under a microscope the media should appear to be dark and purplish black in color. If it is reddish or reddish brown that means that it has been oxidized. If it appears to be green it means that the coating of Manganese has been stripped from the media. If the media has been oxidized or stripped it can be considered spent.

The mesh size of the grains should be between 16 and 50 standard U.S. screen.

The sampling procedure for the Manganese Greensand is similar to that used for ion exchange resins. The sample should be representative of the entire bed after backwashing. That is, a composite sample should be taken, ideally with core tube sampler.

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