

ZEOMANGAN

Soluble Iron, Manganese & Hydrogen Sulfide Remover

Zeomangan is a purple-black filter media capable of effectively removing soluble iron, manganese and foul smelling hydrogen sulfide from well water supply. Zeomangan is processed from ceramic zeolite granule and can be used in a completely closed pressure system with no aeration or repumping, or in an open gravity filter system.

PHYSICAL CHARACTERISTICS

Apparent Density	1.0 g/ml
Shipping Weight	30 kg/ 30 lt
Specific Gravity	2.5 - 2.6
Screen Grading (Dry)	16 x 30 mesh
Effective Size	(0.65 ± 0.05) mm
Uniformity Coefficient	Less than 1.5
PH Range	6.2 - 8.5
Maximum Temperature	25 °C
Maximum Pressure Drop	0.85 kg/cm ²
Backwash Rate	40 - 50 m/hr
Service Flow Rate	5 - 12 m/hr
Minimum Bed Depth	70 cm



Operation Methods

Continuous regeneration of Zeomangan is strongly recommended whenever iron (Fe) removal, regardless of the presence manganese (Mn), is desired. Continuous regeneration can be done by simply adding predetermined amount of potassium permanganate (KMnO₄) and chlorine (Cl₂) to the raw water prior to the filtration system containing Zeomangan. Cl₂ must be fed upstream of KMnO₄ with 10 – 20 seconds contact time whenever possible. Below is an estimate how much Cl₂ and KMnO₄ is required for continuous regeneration of Zeomangan:

Cl ₂ (mg/L)	KMnO ₄ (mg/L)
= mg/L Fe	= (0,2 x mg/L Fe) + (2 x mg/L Mn)

In the absence of Cl₂, continuous regeneration of Zeomangan can still occur by using the following amount of KMnO₄:

Cl ₂ (mg/L)	KMnO ₄ (mg/L)
None	= (1 x mg/L Fe) + (2 x mg/L Mn)