



# StaRMNoX™ HIGH PURITY MANGANESE DIOXIDE FILTER MEDIA



## ADVANTAGES

- Highly effective in removing iron, manganese, and hydrogen sulphide from water over wide pH range.
- Excellent catalytic properties for oxidation and precipitation of contaminants.
- Long-lasting and low-maintenance, reducing operational costs.
- Does not require regeneration by  $KMnO_4$
- Environmentally friendly and safe for potable water applications.

## PHYSICAL PROPERTIES

- Color: Black to dark brown
- Particle Size: 0.5 - 1.0 mm | 1 - 2 mm
- Uniformity Coefficient: < 1.7
- $MnO_2$ : 75 - 80 %
- Bulk Density: 1900 Kg/M<sup>3</sup>
- Moisture Content: < 1%
- pH Range: 6.5 - 8.5
- Acid Solubility < 1 %
- Specific Gravity: 4.5
- Hardness Mohs: 5 - 6

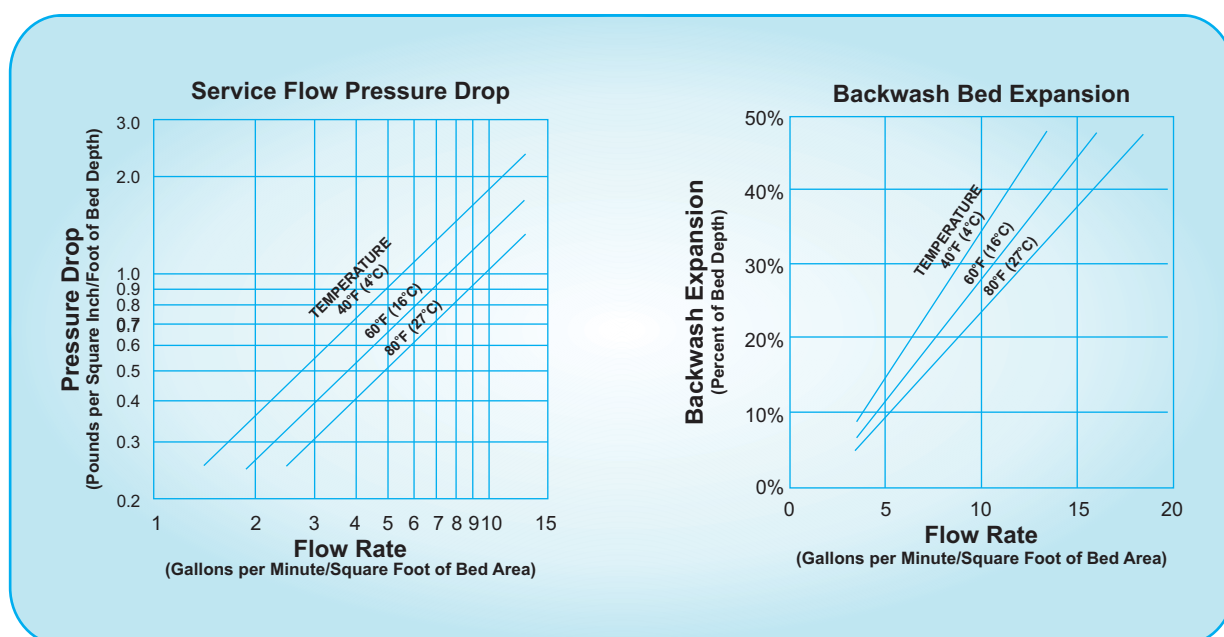
## CONDITIONS FOR OPERATIONS

- Bed depth: 28 - 34 inches
- Maximum Temperature: 40°C (104°F)
- pH Range: 5 - 9
- Service Flow Rate: 15-30 (m/h)
- Backwash Flow Rate: 50-70 (m/h)
- Bed Expansion During Backwash: 15 - 30 %
- Oxidant type: Chlorine
- Oxidant Form: 12.5% Sodium Hypochlorite
- Oxidant contact time: 10 - 30 seconds
- Typical oxidant dosage: 0.5-2 ppm
- Regeneration - Continuous w / oxidant addition
- Removal efficiency - 95 - 99% for Iron - 99 % for Manganese

**Chlorine Regeneration:** To rejuvenate filter performance, create a chlorine solution, initiate a backwash cycle to remove debris, introduce chlorine evenly, allowing it to react with contaminants. After a designated contact period, rinse the bed thoroughly, and neutralize any residual chlorine. Safety precautions are crucial during handling. Routine monitoring and adjustments ensure sustained filtration efficiency, making chlorine regeneration a valuable method for extending the life of manganese dioxide filter media and maintaining optimal performance.

## STORAGE AND MATERIAL HANDLING INSTRUCTIONS

- Store in a cool, dry place away from direct sunlight.
- Keep the product sealed in its original packaging until use.
- Avoid exposure to moisture to prevent agglomeration.
- Hydrogen Peroxide is specifically prohibited for use as an oxidant.
- Use appropriate personal protective equipment (PPE) when handling.
- Do not inhale dust or allow contact with eyes and skin.
- Follow local regulations for disposal of unused material.



## ORDERING INFORMATION

Description	Bag Weight	Wt. / Cu.Ft	Bags / Pallet	Weight / Pallet	Pallet Dimensions
StaRMNoX 0.5 - 1.0 mm	25 Kgs	55 Kgs	40	1015 Kgs	45" x 45" x 30"

- \*Weight Per Cubic Foot is Approximate.
- \* Custom Sizes Available Upon Request.

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**Please note that specifications may change without prior notice.**