

MEDIA & FILTRATION DATASHEET

HYDROX

Catalytic media for the removal of Iron, Hydrogen Sulfide and Manganese, otherwise known as the "troublesome trio". Removing these contaminants can be a challenge.

ADVANTAGES

✓ Superior performance

- High MnO_2 concentration (68%-82%) with resistance to common oxidants such as NaOCl , O_3 , O_2 & KMnO_4
- Good bed expansion vs other natural manganese dioxide media with high MnO_2 content above 68%.
- Stable stratification with support layers like gravel & garnet
- High filtration velocities up to 24 m/h in application with Air Filter Evolve Systems
- No chemicals needed for start-up or regeneration.
- A low bulk density, the properties and shape of the Hydrox media allow for a stable filtration performance

✓ Lower cost

Increased filtration velocity means that less media is required to accomplish the same flow rate as when compared with other iron removal media. Due to its high Manganese Dioxide content, no chemicals are required for the regeneration of the media.



✓ Smaller tanks

Due to the higher service flow rate, less media is required

✓ Application

Hydrox can be used as single or multilayer media in filtration applications. Hydrox is also suitable for Evolve Air Filter Systems.

✓ Backwash

As Hydrox is a natural mineral, it must be properly backwashed during start-up of the system until all dust particles are removed & the drain water is clear.

REMOVAL CAPACITY

Iron	10 PPM
Hydrogen Sulfide	3 PPM
Manganese	5 PPM

OPERATING CONDITIONS

Activate ingredient	Manganese Dioxide (> 68%)
Filtration velocity*	8 - 24 m/h
Freeboard	30 - 50% of bed depth
Backwash velocity	35 - 55 m/h
pH range	6.5 to 9.0
Bed depth	20" minimum

* varies according to inlet iron quantity



HYDROX

Traditional treatment methods

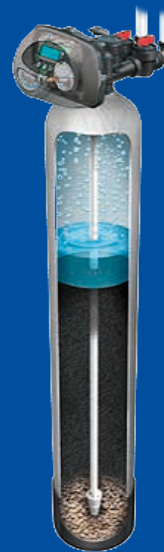
The use of additional oxidizing agents (oxygen, chlorine, ozone, potassium permanganate, etc.) is recommended. Oxidizing agents will enhance the performance of HYDROX and will aid in keeping a clean filtration bed.. They oxidize the media, which enables HYDROX to perform quicker and keep cleaner. Any oxidation method should be applied upstream of the filter bed. Exceeding 4 ppm of free chlorine may result in damage to the filter bed.

How HYDROX works!

The active ingredient in HYDROX is Manganese Dioxide (> 68%), which acts as a catalyst to use the oxygen in water to oxidize minerals and gases, so they will drop out of solution and be entrapped in the filter bed. During the backwash these contaminants will be flushed from the bed.

Note

Oxidizing chemicals may be used with HYDROX to enhance performance, though they are not always required. ORP testing is recommended to determine the oxygen content of the water to be filtered.



We recommend you to use Hydrox with an Evolve Air Filter System and optional ozone generator.

ORDER INFORMATION

Reference	0903060001 (10871000041)
Item name	HYDROX MnO2 Media 0.5 - 1.5 mm
Packaging	25KG - 15L Bag
Bulk density	1.5 +/- 0.1 kg/l

CERTIFICATION

Products used for treatment of water intended for human consumption - Manganese dioxide

