

# MANOX

## Filter Media

Manox is a granular water filtration media used for the removal of arsenic, iron and manganese. Through a natural chemical reaction, Manox has the ability to help you produce clean, high-quality water. Manox works because of a catalyst reaction whereby iron and manganese are oxidized on the media. Daily backwashing then flushes trapped particulate from the filter bed.

### Applications:

Filtermedia for catalytic removal of dissolved iron, manganese and arsenic with the following advantages

- passes its activity on to the surrounding sand grains,
- does not require ideal pH environment,
- does not require regeneration by  $\text{KMnO}_4$ .

### Conditions for Operation:

pH : 6.5-9.0

Bed Design : Suggested 100 cm sand and 10 – 40 cm Manox. Dependent on application and water quality.

Freeboard : 40% of bed depth (min.)

Service flow rate : 10 – 15 m/h

Backwash flow rate : 40 m/h

### Packaging:

30 kg bags.

#### Chemical analysis (Average )

MnO <sub>2</sub>	mass-%	75
Fe <sub>2</sub> O <sub>3</sub>	mass-%	6.8
SiO <sub>2</sub>	mass-%	4.6
Al <sub>2</sub> O <sub>3</sub>	mass-%	2.5
Moisture	mass-%	< 1

#### Physical characteristics (Average )

Density	g/cm <sup>3</sup>	3.6
Bulk density	kg/m <sup>3</sup>	2000
Shape		irregular
Colour		dark brown to black
Sizes available		0.5-1.6 mm