

BIRM

- REF. RA072;
- granular filter media used for the reduction of iron and manganese dissolved in the water. In ground water the dissolved iron is usually in the ferrous bicarbonate state and is not filterable; BIRM acts as an insoluble catalyst to enhance the reaction between dissolved oxygen and iron compounds, producing ferric hydroxide which precipitates and may be easily filtered;
- the physical characteristics of BIRM provide an excellent filter media which is easily cleaned by backwashing to remove the precipitant;
- BIRM is not consumed in the iron removal operation;
- available in 28,3 liters bags;
- following are the conditions necessary for a good efficiency of the BIRM:
 - no oil or hydrogen sulphide in the water;
 - pH 6,8 ÷ 9,0 (if water contains also manganese pH has to be 8,0 ÷ 8,5);
 - dissolved oxygen content must be equal to at least 15% of the iron content;
 - alkalinity should be greater than two times the combined sulphate and chlorine concentration;



CAUTION: chlorination greatly reduces BIRM activity.

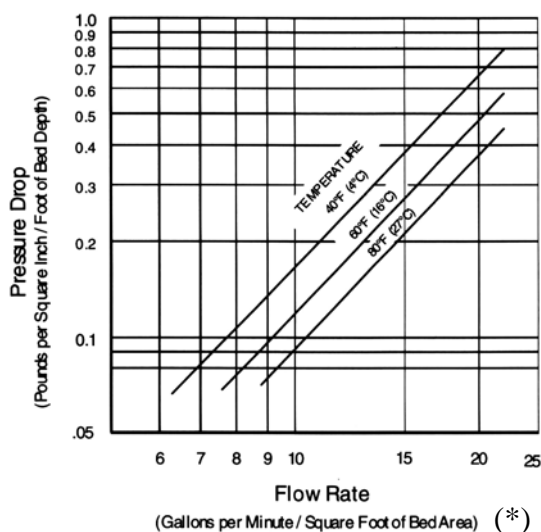
PHYSICAL PROPERTIES:

Colour	black
Specific gravity (g/l)	2000
Bulk density (g/l)	700 ÷ 800
Effective size (mm)	0,6

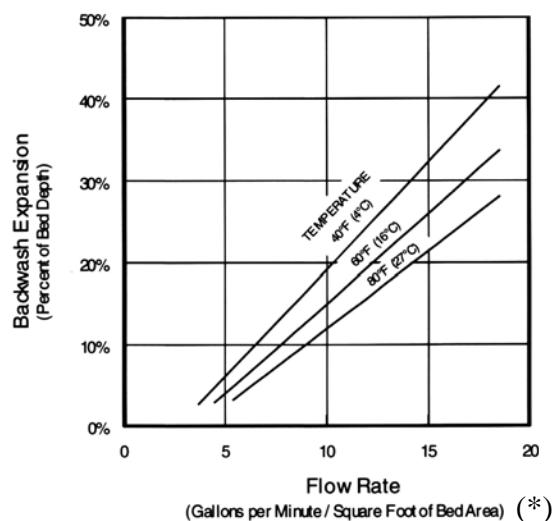
OPERATING CONDITIONS:

Bed depth (mm)	750 ÷ 900
Service flow rate (m ³ /h m ²)	9 ÷ 13
Backwash flow rate (m ³ /h m ²)	24 ÷ 30
Backwash bed expansion (%)	20 ÷ 40

SERVICE FLOW – PRESSURE DROP



BACKWASH BED EXPANSION



(*): Note: a “Gallon per Minute / Square Foot of Bed Area” is equal to 2,44448 m/h .