

FERARRIUM F Filter Media

FERARRIUM F is a filter media designed for water filtration from iron compounds, suspended solids, and petroleum products. It significantly reduces color, turbidity, phenols, and phosphates.

The material is based on natural aluminosilicate, suitable for both drinking water treatment and industrial water purification, including the final treatment of biologically purified wastewater. It effectively removes iron, manganese, strontium, heavy metals, phosphates, petroleum products, and phenols.



FERARRIUM F is recommended for use in both pressure and non-pressure systems.

Unlike other media, it is not treated with additional chemical coatings based on manganese or other catalytically active metals, preventing operational failures caused by coating depletion or washout.

FERARRIUM F is a highly durable material. Catalytically active components are evenly distributed within the granules, ensuring efficiency even if the granules break.

The material is non-consumable, has a high contaminant retention capacity, and meets filtration standards efficiently.

It performs exceptionally well when combined with **FERARRIUM M** as the bottom layer of a multimedia filter.

Advantages

- Operates effectively at pH ≥ 6.5 ;
- Pre-chlorination does not reduce **FERARRIUM F** activity;
- Increases water pH by 0.5–1.5 units during startup, enhancing iron removal efficiency;
- Versatile, lightweight, and cost-effective;
- Requires no chemical regeneration; backwashing with water is sufficient;
- High contaminant retention capacity ensures extended intervals between backwashes with consistent water quality (iron content below 0.2 mg/l and minimal pressure drop);
- Improves sand filter performance by enabling higher filtration rates;
- Free of chemically active coatings, eliminating failures due to depletion or washout;
- Reduces operational costs when replacing quartz sand with **FERARRIUM F**;
- Suitable for non-pressure filtration systems;

Application Recommendations

Filtration speed: 8–15 m/h (up to 20 m/h for mechanical impurities);

Backwash speed: 20–45 m/h;

Backwash duration: 3–5 minutes;

Layer expansion during backwashing from 30%;

Minimum layer height: 40 cm for mechanical impurity filtration;

Layer height in clarifying and iron removal filters: 700–1200 mm;

Can be used in multilayer filters with **FERARRIUM M** as the bottom layer (ratios of 20/80 or 30/70).

Usage Conditions	Significance
Iron concentration	Up to 15 mg/l
Permanganate oxidizability	Max 6 mg/l
pH	Not less than 6.5
Water temperature	2 - 80°C

Composition: silicon oxide, aluminum oxide, iron oxide, calcium and magnesium oxides, sodium and potassium oxides

Density kg/m ³	1400–1500
Bulk Density kg/m ³	500–650
Color	Brown
Nonuniformity coefficient	1,2–1,4
Particle sizes: 0.3–0.7 mm, 0.7–1.4 mm, 0.7–2.0 mm, 0.8–1.2 mm, 1.4–2.5 mm (custom sizes available)	
Packaging: 25 L bags ≈ 15 kg. 50 bags per pallet (1250 L total)	