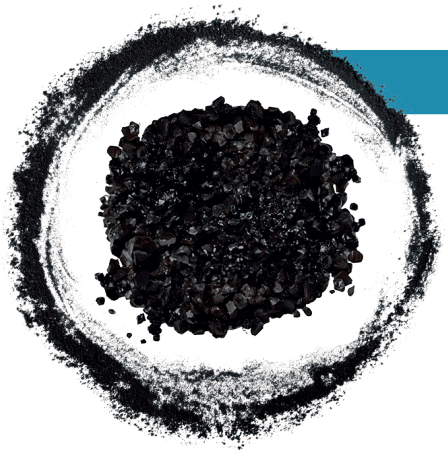
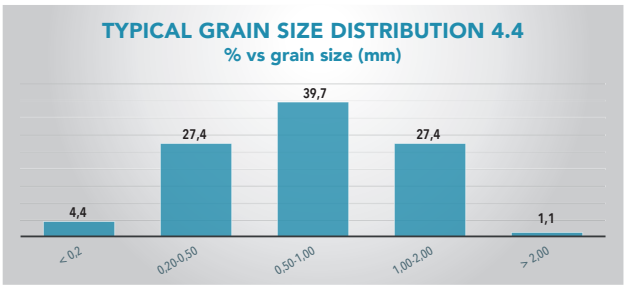
PVRA 4.4

Adsorbent material based on iron oxyhydroxide with optimized particle size distribution, designed to provide high filtration efficiency with lower water and energy consumption.



LOW BACKWASH VOLUME FILTRATION

PVRA$^{4.4}$ removes **arsenic**, phosphates, vanadium, antimony, selenium, molybdenum, uranium, lead, and chromium. Its selected granular composition, **low in fines**, extends service life, reducing plant downtime and helping to contain operating costs.



TECH. DATA AND PERFORMANCE

Chemical composition	β-FeOOH e $Fe(OH)_3$
Dry residue	55-60%
Diameter of particles Typical fraction < 0.2 mm Typical fraction < 0.2 mm + > 2.00 mm	0,2-2 mm < 5% < 10%
Apparent density	1,1-1,2 kg/dm^3
Specific weight of grains	1,5-1,7 kg/dm^3
Iron content (in dry material)	610 g/kg (±10%)
Theoretical absorption capacity Operational conditions: 24 h of stirring at a speed of 10 rpm, ambient temperature, pH 7 ± 0.1 pH units, initial solution 1000 mg/L As, dry iron hydroxide weight 1 ± 0.05 g	15-25 g As/kg (on product at 50% water)
Specific surface area (BET)	about 300 m^2/g

ITALIAN CHEMICAL EXCELLENCE

MADE IN ITALY

RECOMMENDED OPERATING CONDITIONS

Height of the bed	80 -160 cm
Freeboard	50%
Maximum filtration rate	20 m/h
Empty Bed Contact Time (EBCT)	≥ 3 min
Operating pressure	from 1 to 6 Bar
Maximum head loss	0,5 bar (7 PSI)
Backwash rate	24-26 m/h
Backwash duration	until effluent is clear
MUL (NSF/ANSI/CAN 61)	≤ 125 mg/Lm2/g

The product is supplied in FIBC "big bags" of approximately 1,000 kg, or, upon request, in 25 kg bags. The product is not subject to degradation and can be stored for at least one year. The material should never be allowed to dry out completely (for example, it should not be exposed to sunlight).

PVRA® meets the requirements of the **DIN EN 15029** standard.

PVRA® is registered in accordance with Regulation(EC) No. **1907/2006** (**REACH**).

PVRA® is **NSF/ANSI/CAN 61** certified.

The production plant is managed and controlled according to a quality process certified under the standards UNI EN ISO 9001:2015, UNI EN ISO 14001:2015, and UNI EN ISO 50001:2018.

PVRA® technology

sales@pvra.it
+39 0424 383635
+39 345 6583996

ACQUANOVA srl
Via Papa Giovanni Paolo II, 54/56
Cassola (Vicenza) Italy