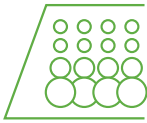
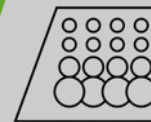


ION EXCHANGE RESIN, ACTIVED CARBON AND PYROLUSITE



INDEX

MWG
ITALIAN WATER TECHNOLOGY



MWG Resin

- Gel Strong Acid Cation Exchange Resin;
- Light coloured;
- Gel type Strongly Acidic unfunctional cross linked polystyrene structure containing Sulphonic Acid groups. It is a high capacity gel type resin with excellent physical and chemical properties;
- It is specially designed for the treatment of potable water. The resin is extremely robust and has excellent physical and chemical characteristics;
- Due to its high exchange capacity, it is recommended where hardness of Calcium and Magnesium salts are high. The resin is primarily used in industrial water softening application in Na+ form;
- Shipped in 25 liter bags.



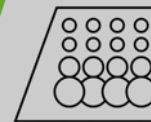
Ref	Description	Fam.	Subfam.	Disp. Stock
RA600	MWG STRONG CATION GEL RESIN (Na)	065	301	•

Typical Physical	
Polymer Matrix Structure	Polystyrene
Functional Group	R-(SO3) ⁻ M ⁺
Functional Group	Sodium (Na ⁺)
Physical Form and Appearance	Spherical Beads
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,7 max
Water Retention, Na ⁺ form	47 ÷ 53%
Swelling Na ⁺ → H ⁺	10% max
Shipping Weight, Na ⁺ form	820 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity, Na ⁺ form	1,9 eq/l min.
pH Range	0 ÷ 14

Suggested Operating Conditions	
Maximum Temperature	140°C (284°F) max.
Maximum Temperature	0,75 m (30")
Backwash Rate	40% bed expansion
Regeneration	
Regenerant Concentration	10% NaCl or saturated salt water
Flow Rate	2 ÷ 8 BV/h (0,25 ÷ 1,00 gpm/cu.ft)
Contact Time	Same as Regenerant Flow Rate
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	Same as Service Flow Rate
Displacement Rinse Volume	Same as Service Flow Rate
Fast Rinse Volume	5 BV (37,5 gallons/cu.ft)
Fast Rinse Volume	15 ÷ 30 BV/h (1,85 ÷ 3,70 gpm/cu.ft)

Box: WxLxH	Box: Q.ty	Box: Weight	Pallet: WxLxH	Pallet: Q.ty	Pallet: Weight

Certificates	Manufacturer	Sectors
DM174- 2004, WRAS	MWG	Domestic, Commercial, Industrial



Pyrolusite

- PYROLUSITE is manganese dioxide (MnO₂) of very good quality and pureness obtained by washing, drying and screening of mineral selected for the specific catalytic activity;
- Used as catalyser for the reduction of iron and manganese dissolved in the water, by sand filters, mixed 20÷50 % with sand 0,4÷0,8 / 0,7÷1,2 mm;
- Does not require a compulsory regeneration with KMnO₄ , but you can do a continuous chlorination or a chlorination during the backwash;
- Hardness 3° ÷ 5° Mosh;
- Available in 25 kg bags.



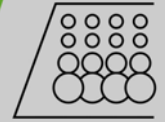
Ref	Description	Fam.	Subfam.	Disp. Stock
RA069	PYROLUSITE (MANGANESE DIOXIDE) BAG 25 KG	065	315	•

Physical Properties	
Colour	brown
Bulk density (g/l)	2000
Effective size (mm)	0,3 ÷ 0,8
Mn (%)	80

Operating Conditions	
Composition	Mixed 20+50 % with sand 0,4÷0,8 / 0,7÷1,2 mm
Suggested filtration speed (m/h)	≤ 10
Max backwash speed (m ³ /h m ²)	25
Min contact time (min)	6
Range pH	6,5 ÷ 8,5

Box: WxLxH	Box: Q.ty	Box: Weight	Pallet: WxLxH	Pallet: Q.ty	Pallet: Weight

Certificates	Manufacturer	Sectors
STANDARD EN 13752	MWG	Domestic, Commercial, Industrial



Activated Carbon



- RA204 activated carbon is not suitable for treatment of water intended for human consumption;
- In granular form;
- Suitable for Chlorine, chemical oxidants, chlorinated compounds and organic contaminants dissolved in water;
- activated carbon require periodic backwashing to eliminate accumulated suspended matters and to regrade the filter bed;
- A good backwashing of the AC filter bed of the start-up is required.
- Mainly bituminous origin coal activated carbons are carefully selected, with a thermal activation process at strictly controlled temperature to obtain a large surface area and a mesoporous structure allowing the adsorption of high molecular weight organic compounds in particular hydrocarbons, atrazine, surfactants;
- Mainly vegetal (coconut base) activated carbons are suitable for applications that need good resistance to the attrition and mechanical shocks; they have a microporous structure allowing the adsorption of low molecular weight organic compounds in particular trichloroethylene, tetrachloroethylene.

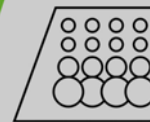
Ref	Description	Fam.	Subfam.	Disp. Stock	
RA204	BAG 25 KG CARB. CYLINDRICAL MIN. SC 45 (47 LT. ABOUT)	065	305	•	
RA201	BAG 25 KG CARB. MIN. GAC 830 M (52 LT.ABOUT)	065	305	•	
RA202	BAG 25 KG CARB. MIN. GAC 1240 M (52 LT. ABOUT)	065	305	•	
RA206	BAG 25 KG CARB. GAC 8X30 VEGETAL	065	305	•	
RA208	BAG 25 KG CARB. GAC 12X40 VEGETAL	065	305	•	

Ref	Type	Origin	Size(mm)	Bulk density (g/l)	Bet (m ² /g)	Iodine number (mg/g)	Ash content (%)
RA204	SC45 cylindrical	Mineral	4	530	700	750	12
RA201	GAC 8x30	Mineral	0,6 ÷ 2,4	480	1100	1000	12
RA202	GAC 12x40	Mineral	0,4 ÷ 1,7	480	1100	1000	12
RA206	GAC 8x30	Vegetal	0,6 ÷ 2,4	500	1250	1100	3
RA208	GAC 12x40	Vegetal	0,4 ÷ 1,7	500	1250	1100	3

Operating conditions	
Bed depth (mm) (dechlorination)	650 ÷ 750
Service flow rate (m ³ /h m ²) (dechlorination)	12 ÷ 15
Backwash flow rate (m ³ /h m ²)	24 ÷ 30
Backwash bed expansion (%)	30 ÷ 40

Box: WxLxH	Box: Q.ty	Box: Weight	Pallet: WxLxH	Pallet: Q.ty	Pallet: Weight

Certificates	Manufacturer	Sectors
STANDARD EN 12915-1:2004 (not RA204)	MWG	Commercial, Industrial



Acid Washed Activated Carbon



- High quality granular activated carbon produced by physical activation of selected raw material of mineral origin;
- It is further washed with acid in order to reduce the ash content;
- Particularly effective for the removal of organic pollutants, dyes, pesticides, chlorinated and aromatic solvents, phenols, tannins, chlorine derivatives and compounds that cause bad smells and tastes in drinking water;
- Suitable for different applications such as the purification of water intended for human consumption, the purification of wastewater, of process and condensates. It is also used in the purification and discoloration processes of intermediates chemical and food products;
- It can be thermally reactivated once its adsorbing capacity is exhaust;
- Available in 25 kg bags.

Ref	Description	Fam.	Subfam.	Disp. Stock	
RA222	BAG 25 KG CARB. GAC 12X30 MINERAL ACID WASHED	065	305	•	

GENERAL PROPERTIES			
Iodine number	Astm D 4607	mg / g	1.000
Moisture as packed	Astm D 2867	%	2
Size	Astm D 2862	Mesh	12 x 30
Methylene blue index	12 Mesh / 30 Mesh	%	5 - 5
Indice Blu di Metilene	Cefic Dab VI	ml	18
CCl4 adsorption	Astm D 3467	%	60
Surface area (B.E.T.)	Astm D 3663	m ² /g	1.100
Bulk density	Astm D 2854	kg/m ³	460
Density after back-washing and draining		kg/m ³	420
Iron (acid extraction)		ppm	300
Hardness	Astm D 3802	%	95
Ash content	Astm D 2866	%	8
pH	Astm D 3838	-	neutral

Box: WxLxH	Box: Q.ty	Box: Weight	Pallet: WxLxH	Pallet: Q.ty	Pallet: Weight

Certificates	Manufacturer	Sectors
STANDARD EN 12915	MWG	Domestic, Commercial, Industrial