

Product name: FILTERSORB® SP3  
Function: Temporary Scale Prevention

## Introduction:

Watch is the embodiment of a new technology, Nucleation Assisted Crystallization (NAC). Transformation of Calcium and Magnesium hardness into non-soluble micro crystals is the fundamental of this unique product. The formed crystals provide essential minerals to the water making it healthiest water available. FILTERSORB® SP3 doesn't add up any sodium in the water like conventional softeners.

## Features:

- Extremely efficient – 5 seconds contact time regardless of hardness level. Conventional Ion Exchange resins requires 90 seconds.
- No salt or other chemical regenerators required.
- No backwash waste. Can be used in areas where water softeners are banned. Protects the environment and reduces water usage.
- Long lasting media; not consumed by the reactions.
- No control valve or electricity required.
- Media can be used in both conventional pressure vessel or POU cartridge form.
- Media operates in up flow condition.

## How does it work?

FILTERSORB® SP3 is a highly active form of heterogeneous catalyst for transforming the temporary hardness from water to inert calcium carbonate crystals. The formed crystals are stable and do not form scale deposits. They are easily removed with the water flow and will travel practically untransformed in pipes and appliances.

There is no induced pH change during the operation of FILTERSORB® SP3 media.

FILTERSORB® SP3 is fundamentally and functionally different from conventional Ion-Exchange resins.

Due to the special Nucleation Assisted Crystallization (NAC) Technology the FILTERSORB® SP3 is a fast acting heterogeneous catalyst, requiring a contact time of a few seconds.

*See presentation on **NAC**: [weblink](#)*

*See all Presentation on FILTERSORB® SP3: [Presentation Link](#)*

## Applications:

FILTERSORB® SP3 has proven itself in a variety of applications as an alternative to ion exchange softening or other conventional water treatment methods. The maintenance-free characteristics make it especially suited for Foodservice and Commercial applications where equipment maintenance is often overlooked. FILTERSORB® SP3 treated water preserves the essential minerals Calcium and Magnesium, making the water most healthiest drink available.

**Home appliances:** Faucets, water pipes, shower heads, shower cabins, toilets. All beverage systems, kitchen machines, dish washers, ice cubes, compact washers and dryers.

**Major appliances:** Central heating, air conditioners, water heaters, air humidifiers, coffee and tea makers, solar heating systems, water coolers.

**Boilers:** Hot water boilers, central heating boilers, combo boilers, catering water boilers, boilers and pool heaters, commercial water heaters, industrial hot water boilers.

**Cooling towers:** Closed circuit cooling towers, open circuit cooling towers, concrete cooling towers, cross flow cooling towers.

**Industrial appliances:** Winery, Car Washing, Dairy Processing, Food & Beverages, Injection Molding, Irrigation, Nurseries, Reverse Osmosis pre-treatment etc.

## Certification:

- FILTERSORB® SP3 is certified under ANSI/NSF 61 from WQA, USA.
- FILTERSORB® SP3 is BS 6920:2000 and WRAS (British Standard, UK) certified.
- FILTERSORB® SP3 is tested to meet MSZ 448-36:1985 standard (Hungary).
- FILTERSORB® SP3 is certified from Department of Environmental Hygiene (Poland).

## Technical Specification & operation Parameters:

### Physical Characteristics

Appearance	White / opaque solid granules
Composition	modified ceramic beads
Bulk weight (kg/m <sup>3</sup> )	780
Particle size (mm)	0.55 - 0.75
Moisture content	10 - 25%

### Operational parameters & water impurities

Flow direction	Up Flow
Recommended operating temp.(°C)	5 to 80
pH range	6.5 to 9.5
Hardness, max. mg/L (ppm)	1400
Salinity, max. mg/L (ppm)	35000
Iron, max. mg/L (ppm)	0.5*
Manganese, max. mg/L (ppm)	0.05
Free chlorine, max. mg/L (ppm)	3
Copper, max. mg/L (ppm)	1.3
Oil	free
Hydrogen sulfide	free

\* *Filtersorb® SP3 is able to remove Iron from water with very high efficiency.*

**Note:** Do not use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. System must be maintained according to manufacturer's instructions. Pre-treatment for sediment, Iron, Hydrogen Sulfide, Manganese, hydrocarbons and Copper may be required depending on conditions. Install systems in new facilities with copper pipe after six weeks of water use.

**Special Information:** FILTERSORB® SP3 has good capacity to absorb Iron, Copper, Manganese, Lead, Zinc etc. Hence in high concentration presence of these contaminants the FILTERSORB® SP3 beads may change color and come to an end of the media life. From studies it's also possible that the media might change color due to dye leaching from the container tank made of [polyethylene](#).

*In case of any strange color change of the FILTERSORB SP3 media beads or the treated water is noticed, please contact us with detailed water analysis.*

## Handling & Storage:

FILTERSORB® SP3 is normally shipped in the water swollen form and should be stored in a sheltered area and in a manner where the moisture within the beads is retained.

The FILTERSORB® SP3 may be stored in the plastic drums in which it was shipped, provided it's kept tightly sealed.

Before using the FILTERSORB® SP3 it is recommended to turn the container/drum upside down for a day to keep the moisture equally distributed to every bead. SP3 beads that have dried out become free flowing and some shrinking in the bead is evident.

Dry beads will re-swell very rapidly when placed back in water, causing severe strain which may lead to the damage of the bead if it doesn't have the space to swell in volume. Should be beads become dry they may be hydrated with water in a closed container.

- We would advice you that if SP3 material is dried in the air it still hold the moisture even if it may look dry.
- It's not recommended to dry SP3 media in an oven then it loses all the moisture and might damage the media

## Shipping & standard Packaging:

Number of Drum(s) in a pallet	Dimension (L x W x H) (cm)	Shipping Weight (volume in liters)		
1	60 x 40 x 80	50 kg (60 liters)		
4	80 x 60 x 80	200 kg (4 x 60 liters)		
6	120 x 80 x 80	300 kg (6 x 60 liters)		
9	120 x 120 x 80	450 kg (9 x 60 liters)		
18	120 x 120 x 145	900 kg (18 x 60 liters)		