



Antiscalant and dispersant for Reverse Osmosis Equipment



FEATURES

BWT RO-2001 is a high performance multifunctional anti-fouling sequestering agent especially developed for membrane systems.

Fouling during reverse osmosis leads to:

- A reduction in the lifetime of membranes
- Lower quality permeate,
- Higher power consumption,
- More frequent cleaning.

BWT RO-2001 should be used during the pre-treatment phase of reverse osmosis. It is designed to prevent fouling problems encountered when using membranes, including fouling through the formation of insoluble inorganic salts, silica and iron.

PERFORMANCES

BWT RO-2001 is very efficient on calcium carbonate, calcium sulphate, barium sulphate, strontium sulphate, calcium fluoride and silica deposits.

Iron can cause two sorts of fouling problems: those related to soluble iron and insoluble iron.

In either form, iron can cause scaling problems. The use of BWT RO-2001 prevents this from happening.

It thus can be used for a wide type of waters.

CHARACTERISTICS

- Aspect Pale yellow liquid
- Odour slightly ammoniacal
- pH pure 4,6 +/- 0,5
- Density (25°C) 1,19 +/- 0,2
- Solubility in water complete
- Storage Temperature..... Between 5°C and 35°C

DOSE

BWT RO-2001 is dosed continuously between 2 and 5 ml/m³.

BWT RO-2001's dose directly depends on the water quality and the operating conditions.

BWT can assist you at defining the best dose for your installation.

It is better to use BWT RO-2001 pure to avoid any pollution. Nevertheless, if a dilution is necessary, demineralized water or RO permeate shall be used.

The best performance is achieved when BWT RO-2001 is injected downstream of multimedia filters and upstream of cartridge filters.

ADVANTAGES

- Liquid formulation very easy to use (injected with a dosing pump)
- Can avoid the storage of acid cleaners and thus decrease the operation costs, handling of dangerous chemicals and environmental constraints (waste and acid vapours)
- Its formula is designed to limit frequent biological developments observed with classical sequestering agents.
- Reduce the number of dosing systems and minimise the chemical tanks cleaning
- Reduce the stop period of the equipment for cleaning operations
- BWT RO-2001 efficiently optimises the performance and protection of reverse osmosis units.

SHELF LIFE

- Pure in its non-opened packaging: 2 years
- Pure in the dosing tank: 2 months
- Diluted in the dosing tank: 2 weeks

PACKAGING AND ARTICLE CODES

- in bag-in-box of 20 kg - P0007905
- in drum of 250 kg – P0007906
- in IBC of 1200 kg - P0007907



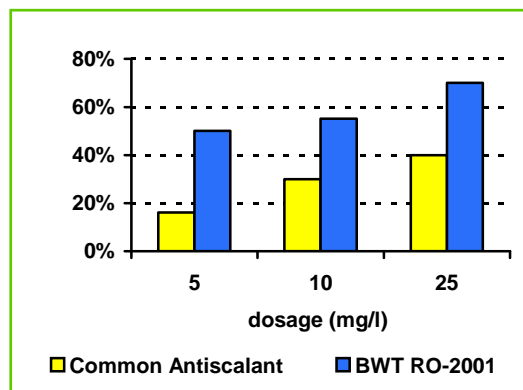
Fouling caused by mineral substances

Fouling of the final membranes is an ever-present risk in reverse osmosis units.

Deposits form depending on the quality of the feed water and the conversion rate of the system. The most common deposits are CaCO₃, CaSO₄, BaSO₄ and SiO₂.

Diagram 1 shows the effectiveness of BWT RO-2001.

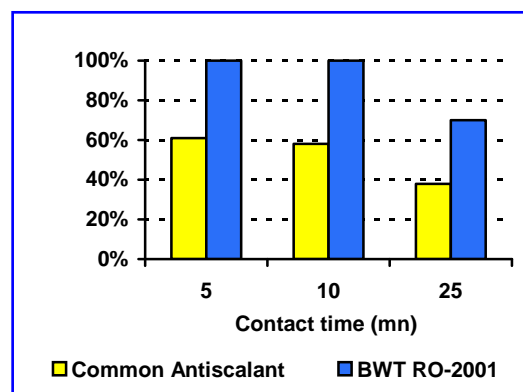
Diagram 1: Threshold effect



Prevention of suspended iron (insoluble)

BWT RO-2001 has remarkable iron dispersion properties, which prevents insoluble iron from fouling up the membranes. Diagram 2 shows the efficiency of the product as a function of the treatment time.

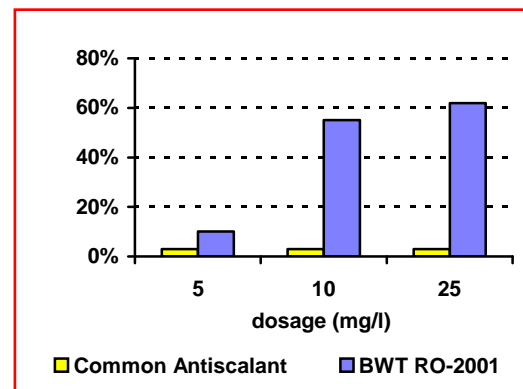
Diagram 2: Iron dispersion



Prevention of soluble iron

Soluble iron is present throughout pre-treatment and can precipitate inside the membranes. BWT RO-2001 enables soluble iron to be kept in solution without causing operating problems. Diagram 3 shows the high inhibition level of BWT RO-2001

Diagram 3: solubilising of iron



The instructions for use shown in our guides and on our labels are based on official and private results that have been shown to be the most effective in practice. They are not intended to be absolute rules, but general recommendations to be adapted to the specificities of each treatment, due to the many factors beyond our control such as the type of materials and design of installations, water quality, dosing conditions etc. Consequently we cannot be held liable for the results and consequences of that adaptation, which is an initiative beyond our control, leaving the user responsible for any risks inherent in the storage, use and handling of our products. Our liability is expressly limited to the supply of controlled specialities, legally approved for sale and in compliance with their specifications.

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