



Comply with EU regulations CEN/TS 164, EN 15039 and EN 15040 used for treatment of water intended for human consumption

Scale Inhibitor ROPUR RPI-3000C

Date: 06.06.2019

GENERAL

RPI-3000C is the next generation of antiscalant designed to inhibit the scale formation in RO-systems equipped with polyamide-, celluloseacetate- and polyethermembranes with anionically charged surface.

RPI-3000C is a fluid solution of organic phosphonates and polyacrylates with high dispersing effect.

RPI-3000C is an excellent inhibitor for calcium sulphate and calcium carbonate (LSI up to 2.9). It provides a superior action on barium and strontium sulphates. In addition even iron may be stabilized. The specific copolymers used in the formulation are particularly suited to disperse metal-oxide particles like Iron, Manganese or Copper oxides.

APPLICATION AND DOSAGE

RPI-3000C is designed to combine the highest scale inhibitor effect with the smallest dosing amount.

The dosage is controlled proportionally to the feed water flow. Standard metering pumps are used. Fitting materials are PE, PP or coated steel. To prevent a tank biological fouling, the containers have to be cleaned appropriately (alkaline solution, a rinsing with permeate water followed followed by a final DBNPA (0.2% solution) rinsing ideally).

RPI-3000C can be diluted with water in any ratio. However, it is recommended to inject the antiscalant undiluted or as solution up to 10 %. The diluted solutions have to be consumed as fast as possible, preferably within 48 hours after preparation. The dilution must be made only with permeate or distilled cold water. The required Reverse Osmosis dosage level depends on the operating conditions and water composition. It varies in the range of $0.5-10~{\rm ppm}$ as delivered. The Dosing Optimisation can be done with the RPI-Calc web software available at www.ropur.com.

RPI-3000C does not contain any aggressive component. The moderate pH value offers an additional safety protection to operators. The RPI-3000C is environmental friendly and does not harm the soil, rivers, the fauna and flora when its release rate is in accordance with the best practice in the field.





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PHYSICAL PROPERTIES

Appearance: clear, dark yellow liquid

Density: 1,19 - 1,23 g/cm³

pH-value: 4,2 - 5,0 Freezing point: - 10° C

Boiling point/boiling range : 100 – 105 °C Solubility in water: unlimited

STORAGE & HANDLING

RPI-3000C is not classified as a hazardous chemical (GGVE/GGVS, ICOA/IATA). Standard regulations and precautions when dealing with chemical products have to be followed however.

RPI-3000C is easy to store. The storage temperature should be between +2 °C and 35 °C. The product is supplied in packagings suitable also for air or sea transportation. To ensure the longest possible shelf-life, the RPI-3000C must not be stored in direct sunlight.

The safety data sheet is complementary to the above recommendations.

PACKAGING

Polyethylene container (PE)

Standard drum (PE)

Container (PE)

23,5 kg net
240 kg net
1.100 kg net

The data and information contained in this data sheet are based on technical data and tests we believe to be reliable. They are offered in good faith for use by persons having appropriate technical skill at their own discretion and risk. Supplier has no control of design and operating conditions and consequently cannot assume any reliability for results obtained or damage incurred through the use of the product presented. ROPUR RPI Antiscalants are continuously improved and therefore we reserve the right to modify or amend specifications without prior notice.