

# BROXO®

Premium regeneration salts for **water softening** 

- + 100% Soluble salt
- + Best quality with high pressure technology
- + The right product for every installation
- + Contributes to environmental sustainability



At Nouryon, we have been in the salt business since 1918. Today, we're proud to offer our unique BROXO® regeneration salts, pure salt products delivering outstanding results across all types of water softening systems, from large-scale industrial and municipal installations to domestic water softening.



## **Softening water**

it saves time, money and equipment Water is more than just H<sub>2</sub>O. In its natural state, it also contains varying concentrations of calcium and magnesium ions. The higher the concentrations, the harder the water, and that is a problem, because hard water leads to lime scale build-up, also known as scaling, inside appliances, tanks and pipes.



# In large-scale industrial and commercial use, hard water leads to:

✓ Higher energy costs

- ✓ Higher maintenance and replacement costs
- V Loss of systems efficiency and performance



#### In households, hard water leads to:

- Scaling and poor performance in waterheating equipment, from boilers to kettless
- Clogging in household pipes, taps and showerheads, which can lead to serious plumbing problems
- Unsightly lime scale on bathtubs, shower stalls, kitchenware and crockery, often requiring extra cleaning with specialist products
- Reduced cleaning power for all soaps and detergents, including dishwasher soaps and laundry detergents

## **Our solution**

A good water softening system can help prevent all of these problems. For a water softening system to perform at peak levels, however, it needs high quality regeneration salts. Our BROXO® line is the highest quality available and has been developed in close cooperation with producers and suppliers of industrial and domestic water softening systems for optimum performance.

## How water softeners work?

Water softening systems work by removing the calcium and magnesium ions from the water through a process referred to as ion exchange. The ion exchanger consists of one or more tanks filled with millions of tiny synthetic resin beads; each bead is saturated with sodium ions. When the hard water passes through the tank, the calcium and magnesium ions in the water are attracted so strongly by the resin beads that they are absorbed by the beads. At the same time, the sodium ions from the beads are repelled and end up in the water, which is now soft.



In the ion exchanger calcium and magnesium ions are pulled to the resin beads The resin beads release their sodium ions and capture the calcium and magnesium ions



The water is softenend and no longer has calcium or magnesium ions



### What the salt does?

Over time, the synthetic beads become saturated with calcium and magnesium ions and the ion exchanger needs to be regenerated. To do this, brine (water fully saturated with regeneration salt) flows from a separate storage tank into the resin tank, providing new sodium ions to the resin beads and flushing away the calcium and magnesium ions.

# The key to the efficiency of the water softening system is the quality of the salt

Not all salt is the same: sea salt and rock salt, for instance, contain impurities of their own which may not only hamper ion exchange but also affect the overall purity of the softened water. That is why BROXO® products are never sourced from sea salt or rock salt but is vacuum salt, with the highest purity.

## Why BROXO<sup>®</sup> is your best choice

- Sourced from otherwise untouched subterranean salt beds
- Refined to the highest purity levels of 99.8% sodium chloride
- Compacted under extreme pressure for highest product density and best possible product performance
- Fully resistant to caking
- Tailor-made for every water-softening application, whether commercial or domestic



## **BROXO® fits your installation**

**BROXO® 6-15** for industrial and domestic laundries **BROXO® Tablets** for industrial and domestic purposes **BROXO Blocks®** for space-saving compact water softening systems

#### These salts are available as follows:

PRODUCT	ТҮРЕ
BROXO® 6-15mm 10 kg	Compacted salt
BROXO® 6-15mm 25 kg	Compacted salt
BROXO® Tablets 25 kg	Tablets
BROXO® Blokken 2,5kg	Block

# What's more, all of our manufacturing sites and/or processes are:

- ISO 9001-certified
- HACCP-compliant
- SMETA-certified
- EN973 A
- In compliance with Art. 11 of the Biocidal Products Directive, (98/8/EC)

All of our BROXO® products meet the EN 973 Type A Industrial Standard for Regeneration Salt, indicating that our production processes and our packaging fulfil all necessary hygiene requirements.

Because of this, and with the outstanding product quality we offer, it is no wonder that leading manufacturers of water softening systems recommend BROXO® regeneration salts.



# Nouryon

#### We are Nouryon Your partner in essential chemistry for a sustainable future

Industries worldwide rely on our essential chemistry in the manufacture of everyday products such as paper, plastics, building materials, and personal care items. Building on the dedication of our employees and our shared commitment to safety, sustainability, and open innovation, we have established a world-class business and built strong partnerships with our customers. We operate in over 80 countries around the world and our portfolio of industry leading brands includes Eka, Dissolvine, Trigonox, and Berol.

#### Broxo Salt

Customer Service Postbus 9300 6800 SB Arnhem The Netherlands Tel: +31 88 96 94 169 broxo@nouryon.com www.broxosalt.com