

Photo Release



Turning salt water into drinking water, without harming the environment

- Singapore aims to meet up to 30% of its future water needs by 2060 with desalination
- New BASF desalination lab develops ways to make reverse osmosis more efficient and environmentally friendly

March 20, 2017

Media Contact

Yoko Koike
Phone: +65 6432-3565
Mobile: +65 8113-0617
yoko.koike@basf.com



Water, water, everywhere ... but not yet ready to drink? At the newly expanded BASF lab in Tuas, Singapore, scientists are exploring ways to make desalination more efficient and environmentally friendly. Singapore aims to meet 30% of its water needs through desalination by 2030.

Singapore – March 20, 2017 – Singapore aims to meet up to 30% of its future water needs by 2060 with desalination: removing salt from the abundant seawater that surrounds it. Singapore currently uses reverse osmosis for its desalination, which produces pure drinking water by pushing seawater through membranes to remove dissolved

salts and minerals. However, fouling of the membrane can cause expensive downtime or costly repairs for desalination plants, meaning that the process still has room to become more cost effective.

New solutions are also needed to reduce the impact of desalination on the environment. PUB, Singapore's national water agency, wants to cut in half the energy needed for desalination in the future. Additionally, programs to mitigate fouling that use conventional technologies can result in the growth of harmful algae in aquatic environments.

BASF is continuously investing in high-performing and sustainable chemistry to better address the growing water treatment needs for the desalination industry. For this reason, BASF has relocated and expanded its desalination laboratory in Tuas, Singapore, to co-develop solutions with desalination experts in the region and offer analytical supports. The new lab is now fully operational with chemicals, lab consumables, equipment and analytic.

The key objective of the laboratory is to maintain the high level of productivity of desalination plants, and protect these high-investment facilities from scale formation and fouling. One recent development example from BASF is Sokalan® RO 3500, which has been proven to work on a variety of membranes and types of water. Compared to conventional antiscalants, this solution does not cause eutrophication and its resulting growth of algae.

Desalination is a vital way to ensure Singapore's long-term water availability. With new technologies like these, desalination may soon live up to its promise while maintaining a lower environmental impact, and more cost-effective operations.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 114,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of about €58 billion in 2016. BASF shares are traded on the stock exchanges in

Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.

About BASF Water Chemicals

BASF offers an established range of customer-centric solutions and products for the water industry. The portfolio of the globally acting business unit Water Chemicals is used in the key processes of industrial and municipal water treatment. We are a leading supplier of chemicals to purify the raw water used for the production of drinking water, to treat waste water stream and industrial process water, to protect cooling towers, boilers and desalination plants. We are fully committed to the future topic water. Further information can be found at:

www.watersolutions.basf.com