

### **The Liquid Purification Technologies business unit**

The Liquid Purification Technologies (LPT) business unit at specialty chemicals company LANXESS is one of the world's most important providers of water treatment solutions. It plays a leading role in the development and manufacture of ion exchange resins and is heavily involved in the reverse osmosis membrane elements field.

The Lewatit® brand of ion exchange resins and the Lewabrane® series of membrane filter elements offer two premium technologies that complement each other perfectly. The reverse osmosis membrane technology desalinates the water, while the exchange resins can selectively remove unwanted ions, for example for fine purification.

#### **Two technologies, one goal – clean water**

LANXESS high-performance products are used in numerous industries to treat and purify water and other liquid media. The most significant field of application is the treatment of industrial process water. Energy suppliers use these products in the production of boiler feed water and steam to avoid scale and corrosion. This results in a significant increase in the efficiency, operational reliability and service life of power plants. Another important area of application is the production of ultrapure water, which microelectronics manufacturers require to produce semiconductor components and other items.

Energy-efficient, environmentally friendly desalination technologies such as reverse osmosis play a key role in seawater desalination for using this precious resource in agriculture and producing drinking water. For this and many other areas of water treatment, Lewabrane membrane elements are ideal in combination with the Lewatit range of ion exchange resins.

#### **LANXESS AG**

Contact:  
Ilona Kawan  
Corporate Communications  
Spokesperson Trade & Technical  
Press  
50569 Cologne  
Germany

Phone +49 221 8885-1684  
[ilona.kawan@lanxess.com](mailto:ilona.kawan@lanxess.com)

Page 1 of 3

## Background Information

Removing toxic substances is key to the treatment of industrial wastewater. Environmentally harmful substances can be reliably filtered out of the water by exchange and adsorption materials. Areas of application include mining, catalysis in the chemical and petrochemical industries, metalworking and pharmaceuticals. In the food industry, Lewatit<sup>®</sup> is used for the production of granulated sugar and liquid sugar syrup. It ensures the raw sugar is bleached and, as a result of the removal of bitter substances, tastes even sweeter. Lewatit<sup>®</sup> products are also used as catalysts in brewing water production. In this process, dissolved oxygen reacts with hydrogen to form water that satisfies all food purity requirements – as required by the German Beer Purity Law since 1516.

Specific ion exchange resins also enable the effective removal of uranium, arsenic and heavy metals from groundwater so that it can be converted into drinking water. In the household environment, Lewatit<sup>®</sup> is used for softening water, for example in water filters.

### **Comprehensive service complements the product portfolio**

LPT services range from product training courses for user groups to technical advice and rapid problem-solving. With the LewaPlus<sup>®</sup> company software developed by LPT, customers can design their process water treatment on screen and plan treatment down to the last detail, both for reverse osmosis and ion exchange resin processes. This makes the software, which is available free of charge, unique in the industry.

The LPT business unit is part of LANXESS's Performance Chemicals segment, which recorded sales of EUR 2.1 billion in fiscal 2016. It is headed by Jean-Marc Vesselle and currently employs around 500 people worldwide.

#### **LANXESS AG**

Contact:  
Ilona Kawan  
Corporate Communications  
Spokesperson Trade & Technical  
Press  
50569 Cologne  
Germany

Phone +49 221 8885-1684  
ilona.kawan@lanxess.com

Page 2 of 3

## Background Information

### Key brands:

**Lewatit® and Bayoxide®:** The range of ion exchange resins, adsorbers and functional polymers comprises over 150 different products for more than 500 applications.

**Lewabrane®:** RO membrane filter elements for desalinating seawater, brackish water and low-salinity water for the treatment of process and drinking water

**Sites:** Leverkusen, Bitterfeld (both Germany) and Jhagadia, India

For more detailed information go to [www.lpt.lanxess.com](http://www.lpt.lanxess.com)

Cologne, November 2017

### LANXESS AG

Contact:

Ilona Kawan

Corporate Communications

Spokesperson Trade & Technical

Press

50569 Cologne

Germany

Phone +49 221 8885-1684

[ilona.kawan@lanxess.com](mailto:ilona.kawan@lanxess.com)

Page 3 of 3