

High-performance defoamers

Optimal foam control in industrial processes



KEBOSPUM

Highly effective foam control



Keeping foam at bay!

Foam often forms in industrial transportation and production processes, this usually occurs from the turbulence of the air introduced into the system or during the release of process gases in combination with foam-forming substances. This foam can significantly impair the production process and have a negative impact on the following important parameters

→ **Efficiency, maintenance costs, hygiene, occupational safety and product quality.**

Preventing foaming and actively controlling it are of crucial importance and go hand in hand. At KEBO, we offer a wide range of high-performance defoamers with different compositions and special properties that are tailored to the individual requirements of different customers. This enables us to deliver reliable results for a wide range of applications. These include food processing industries (such as yeast, starch, sugar, potato processing and fermentation) as well as industrial cleaning and paper production. Our optimized defoamers guarantee that the valuable space in containers is not wasted unnecessarily and that the surfaces of substances are not damaged as that can result results in the loss of their natural protective layer.

The basic advantages for you when using KEBOSPUM:

→ **Early prevention, fast foam destruction, and effective control.**

KEBO is at your side to help you select the defoamer that is the most suitable for your production process. Our expertise, spanning many decades, enables us to always offer you innovative, state-of-the-art solutions. You can rely on our professional support in the selection and application of defoamers to ensure smooth and efficient production in your company.

Just like the overall result: efficient and competitive production!

KEBO, your partner with 100% reliability

Product development at KEBO is always a team effort.

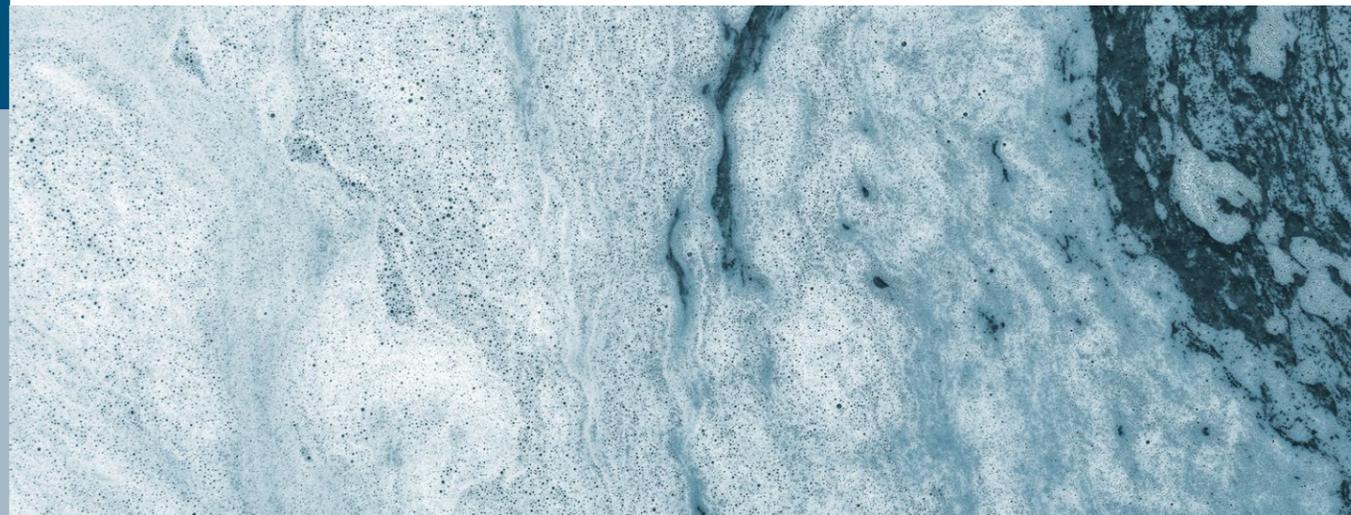
That's why we bring together in-house experts from a wide range of disciplines who know exactly which parameters are important for your individual processes and systems in order to take them into account during development, both in the chemical analysis procedures and in the test series. Ultimately, this results in customized, tailor-made solutions that are precisely geared to you and your problems.

Just as we see ourselves as team players and partners at eye level in close cooperation with you as our customer.

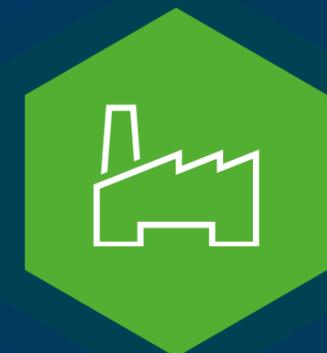
After all, at the end of the day, it's all about you and your personal business. That's why listening to you always comes first for us in order to accompany you throughout the entire development process from start to finish as well as to support you with our expertise at all times.

We know from our many years of experience that every industry, process, and system has its own specific requirements. You never get an "off-the-shelf" product from us for this reason. It is always the exact one you need.

Regardless of the segment that you operate in, whether specific application temperatures need to be taken into account or whether a silicone-free or silicone-containing solution is required for your process – the result must be right. We will help you get there!



Benefit now from the many advantages of the **KEBOSPUM defoamers** and exploit the full potential of your systems!



KEBO defoamers are designed to either eliminate foam immediately (**defoamer with a knock-down effect**) or to prevent foam formation in advance (**antifoam with a hold-down effect**). In both cases, the focus is on the long-term suppression of foam formation. They are used across a wide range of industrial applications, including food processing (such as sugar, starch, yeast, potato processing, and fermentation), industrial cleaning, the paper and pulp industry, and as technical process systems.

All KEBOSPUM defoamers are Halal and Kosher certified.



We always find the perfect defoamer for your specific production requirements.

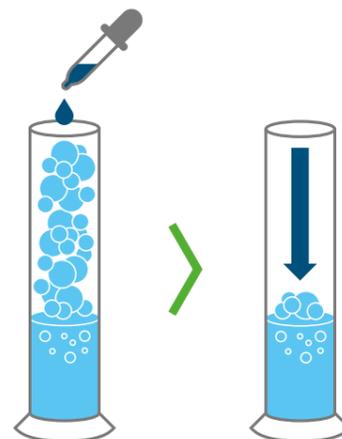
This was also the case in this specific practical case with the task of finding a suitable defoamer for the interior of a sugar factory. The focus here was on the process steps of extraction, carbonation, and evaporation. The requirement was that the defoamer should not only work effectively at high process temperatures of up to 75°C, but also have a high chemical stability in order to have a long-lasting effect.

Our evaluation included a comparison with our KEBOSPUM KIS and the competitor products, which were in use at the time, in the form of laboratory measurements and an operational test directly on site.

The result: Top performance with high cost savings:

Temperature: 70°C				
	Dosage [ppm]	Time to max. foam height after 20 s [s]	Foam volume after 20 s [ml]	Time for foam decomposition up to 50% of the max. foam height [s]
Without defoamer	0	20.6	140.2	> 120
KEBOSPUM KIS	10 ppm	3.0	19.8	2.6
Competitor 1	35 ppm	6.6	39.1	3.6
Competitor 2	50 ppm	13.7	43.6	10.5

- ➔ **Effective foam control, reduction, or elimination** for the sustainable optimization of your production processes
- ➔ **Good process compatibility** without compromising product quality or equipment
- ➔ **High stability** to ensure consistent foam control
- ➔ **Impressive dosing efficiency** and low dosing rates for being highly economical



High-performance process defoamers can achieve **high overall cost savings** as the required dosage is much lower!

A simple sample calculation:

	KEBOSPUM KIS	Competitor 1	Competitor 2
Start of the campaign	10 ppm	35 ppm	50 ppm
End of the campaign	Up to 20 ppm	Up to 80 ppm	Up to 100 ppm
Total consumption	4,000 kg	15,000 kg	20,000 kg

✓ = very well suited ○ = suitable/depending on the boundary conditions

KEBOSPUM:

Application	Process	Temp.	KIS	KTX	KWX	HTS PL	LBF	AS	BWS	BWO	PP	VPL	VPF	VPN	HES	FES	FEZ	LF	VZ-Series*	
 Beet sugar	Diffusion, extraction, evaporation, crystallization	≥ 40°C	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Flume water, beet washing	5-40°C	-	-	-	-	✓	✓	✓	○	-	○	-	-	-	-	-	-	-	○
 Potato processing		10-40°C	-	-	-	-	-	-	✓	○	✓	✓	-	-	-	-	-	-	-	✓
 Vegetables & fruit	Transport, washing, processing	10-40°C	-	-	-	-	-	-	✓	○	✓	✓	✓	-	-	-	-	-	-	✓
 Starch production		10-40°C	-	-	-	-	-	-	-	-	✓	✓	○	○	✓	✓	✓	-	-	✓
 Fermentation	Aerobic (yeast, amino acids, carboxylic acids, vitamins, antibiotics)	20-40°C	-	-	-	-	-	-	○	-	○	✓	✓	✓	✓	○	✓	-	-	○
	Anaerobic	20-40°C	-	-	-	-	-	-	○	-	○	✓	✓	✓	○	✓	✓	-	-	○
	Bioethanol fermentation	30-40°C	-	-	-	-	-	-	○	-	○	○	○	○	○	✓	✓	-	-	✓
 Biogas		20-40°C	-	-	-	-	○	○	○	✓	-	-	-	-	-	-	○	-	-	-
 Water & wastewater treatment		variable	-	-	-	-	✓	✓	✓	✓	-	-	-	-	-	-	-	✓	-	✓

*Silicone oil emulsion/Food and industrial grade available

Chemistry is our passion



An effective response for every requirement: not only chemical, but also very personal.

We are a globally active company in the specialty chemicals industry. With 100 years of tradition, we stand for quality, service, reliability, and innovation.

When it comes to operating your production facilities, KEBO products and services ensure clean processes. Whether for the sugar industry, the production of ethanol, starch, and yeast, or the steel industry, we meet all of the challenges of chemical cleaning processes, water treatment, and corrosion protection. We see ourselves as a partner to our customers, and we share our knowledge on an equal footing. Our guiding principles in dealing with colleagues, customers, and nature are trust, responsibility, and respect.

Our services:

- Consultation by our chemists and engineers in application technology and, of course, also in your planning of the necessary apparatuses and operating equipment
- A worldwide network of expert sales partners who can provide on-site analysis, planning, and implementation support

[Visit our website](#)



The KEBO Anniversary

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