

POTATO PROCESSING

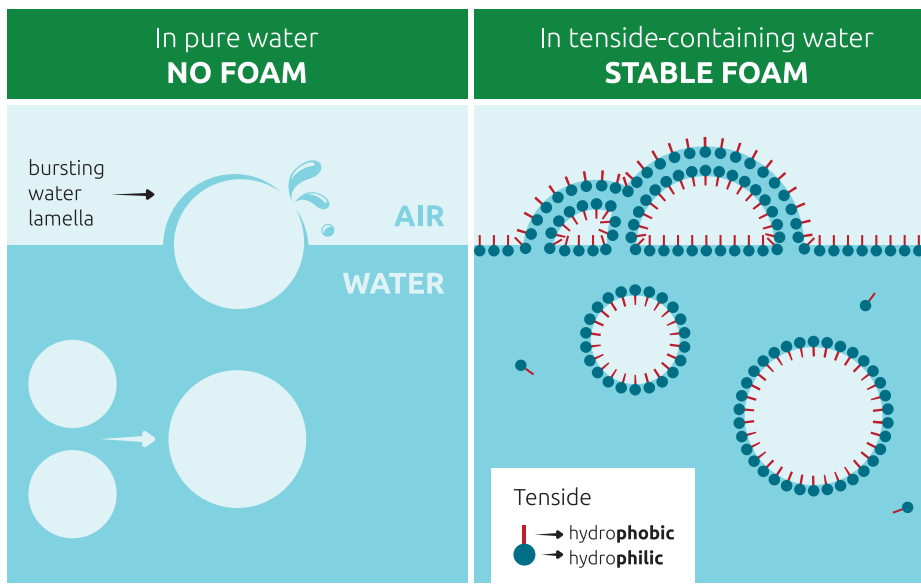


 **BUSSETTI** **KCO**
Gesellschaft mbH

FOAM FORMATION

Producers of potato chips and fries face several challenges during the production process. One of them is the formation of foam, which can occur in the wash or process water. Foaming will reduce the production capacity and throughput as well as the process reliability and it can even have a negative influence on the quality of the final product.

How does foaming occur?



Pure liquids do not form stable foams. Only the presence of surface-active components enables the formation of a stable dispersion of air in a liquid.

Surface-active components such as proteins, impurities and degradation products accumulate preferably at the water/air interface.

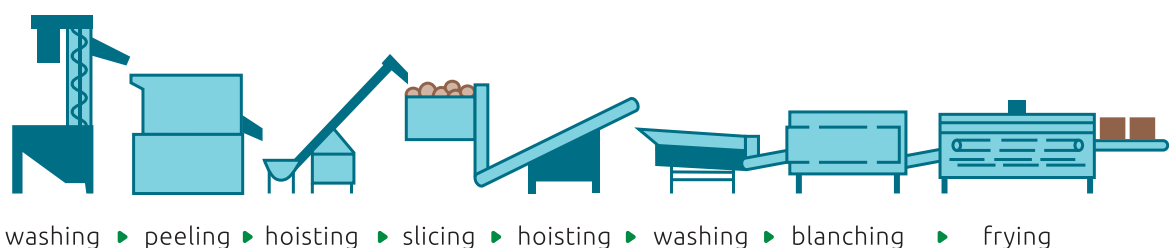
These compounds consist of a hydrophilic (water-affine) and a hydrophobic (water-repelling) part.

At the water/air interface, the hydrophilic part extends into the aqueous phase and the hydrophobic part into the gas phase. The result is a thin film of surface-active components, which supports the formation of a stable foam layer. These substances lead to an altered surface tension of the liquid, resulting in trapped air and an increased foam formation.

Foam formation during potato processing

Naturally occurring surface-active components such as starch and proteins trigger foam formation in the potato processing industry. The presence of certain pH and temperature conditions can even enhance this effect.

This foam formation can be prevented by using Bussetti's GLANAPON antifoaming agents in all production steps:



ANTIFOAMS FOR POTATO PROCESSING

Bussetti's GLANAPON antifoaming agents have been designed to provide the best performance taking into account the relevant process parameters such as layout, set-up and machinery of the plant, potato quality, temperature, pH value and hardness of the process water.

Our products are especially optimized for certain process conditions. In a first step our technical experts analyze the production process and select the most suitable antifoam agent for the given set-up in a second step.

Product	Pour point [°C]	Viscosity at 20 °C [mPas]	Kosher	Halal	Features
Glanapon DG 185	< -10	150-250	Passover Kitniyot	✓	Broad temperature range
Glanapon DG 198	< -10	150-250	Pareve (Passover possible)	✓	Effective at low and medium temperatures
Glanapon DG 199	< -10	25-40	Passover	✓	Effective and easily dosed at low temperature
Glanapon DG 121	< 0	700-1400	Passover	✓	Effective at high temperature
Glanapon DA 260	< -10	450-700	Passover Kitniyot	✓	Fast distribution in the system
Glanapon DA 264	< -10	150-400	Pareve	✓	Economic

Dosages of GLANAPON antifoaming agents

GLANAPON antifoaming agents act in two different ways: they destroy already existing foam and also prevent the formation of new foam. Therefore, a continuous dosage at several, pre-selected points along the production process is advisable. We recommend to find out the optimal dosage and dosing points by industrial trials.

Benefits of using GLANAPON antifoaming agents

- Improved dirt and stone removal at the potato washing step
- More stable and reliable process conditions
- Increased throughput
- Prevention of a blockage of the production line
- Improved product quality



PHOTOCREDIT: arona-design (page 2), stock.adobe.com: 5ph (page 1), mates (page 3), colnihko (page 4)



www.bussetti.at



Contact

HEADQUARTER

Bussetti & Co. GmbH
Röttergasse 57
1170 Vienna | Austria
office@bussetti.at
P +43 1 486 1221
F +43 1 486 1221-155

FACTORY

Bussetti & Co. GmbH
Walterstraße 25
4614 Marchtrenk/OÖ
Austria
P +43 7243 52291