

The solution to avoid foam when recycling plastics

- Efficient and effective
- Improved safety and better hygiene
- Substantial savings
- Increased production output
- EU legislation for food available



Preventative and long-lasting antifoam agents

Excellent performance through effective foam knockdown

Increasingly more plastics are being produced around the world. For a large part of these plastics, the ultimate goal is to be recycled as effectively and efficiently as possible, particularly in the case of polymers PET, PP, PS, LDPE and HDPE. Not only does the demand for plastics increase every year, but ever stricter regulations and requirements are also being imposed by governments. For business-economic reasons, one of the main goals for the recycling business is to efficiently and effectively avoid and keep control of foam. Furthermore, food safety can also be an important issue in the process to avoid and control foam.



Application and properties

Foam is caused by the recycling of shampoo bottles and food packaging in the recycling production process. The combination of turbulent water, high temperatures and certain pH values results in foaming that is difficult to manage. Excessive foaming during production processes can result in:

- Unsafe conditions
- More outages
- Lower production output
- Reduced revenue
- Higher costs
- Problems during transportation

Foam consists of micro- and macro-air bubbles. Van Meeuwen's antifoam agents have been developed specifically to work as antifoam agents and defoamers. Antifoam agents reduce the surface tension of foam lamellae, so that the product works preventatively and the effects lasts a long time.

Effective antifoam agents and defoamers

Examples of successful defoamers for the washing process are:

- VM Antifoam BT66, based on a compound with extremely long lasting effectiveness
- FoodCare® Antifoam X2F, based on an emulsion with effective foam knockdown

For food processing companies, the food safety of recycled flakes is another extremely important aspect. Food grade antifoam agents can be used in the production process for reused food packaging without issue.

Van Meeuwen can offer custom-made solutions if standard products do not meet your requirements. At Van Meeuwen, we focus on cost performance. Creating process improvements for our customers is what drives us. Our family-owned company, which was founded in 1934, entered the process additives market in the 1980's and has specialized in it ever since.

Besides the recycling industry, Van Meeuwen's antifoam agents are used in coatings, detergents, paper, food, biogas and fermentation or distillation plants.

Effective anti-foams and defoamers

Several factors have to be taken into account to select the most effective antifoam agent:

- What is stabilizing the foam?
- Which is the chemical nature of the foaming system (aqueous or non-aqueous)?
- Which is the foam-stabilizing surfactant concentration (ionic or non-ionic)?
- What is the temperature of the foaming system?
- What is the pH value in the system?
- What is the source/cause of the foaming?
- How can an antifoam agent be added (to a process or a system)?
- Which are the effects of the antifoam agent (foam knockdown and durability)?
- Which are the potential negative impacts (spotting, clarity, paintability)?
- Which are the regulatory approvals (FDA, EPA, etc.)?

Are you interested to know what can be achieved in your company? Ask one of our specialists for advice on which one of our (food grade) antifoam agents is the most efficient and effective for your production process.

lubrication ■ services ■ systems ■ chemicals ■ education

Van Meeuwen®
IMPROVING INDUSTRIES

The Netherlands T +31 (0)294 494 494 • info@vanmeeuwen.com • www.vanmeeuwen.com