



AF-Complex® Chemical foaming agents

Foaming plastics made easy

Lightweight plastics with easy processing

Chemical foaming agents are used to create foam structures in plastics. They containing substances react below the processing temperatures and form harmless gases such as carbon dioxide and steam, which dissolve and disperse in the polymer melt under pressure. With decreasing pressure, the polymer expands and forms a cellular foam structure.

By creating a structure tailored to the needs of your application, the following benefits can be achived:

- · Reduction of cycle times
- Avoidance of sink marks
- Density reduction of up to 40 %
- Weight reduction/material savings
- Reduction of CO₂ emissions
- Reduction of warpage
- Increased stiffness-to-weight ratio

Injection moulding

Formulations optimised for injection moulding can minimise the holding pressure and reduce the viscosity, so that even thin-walled components can be foamed.

Extrusion and film

In profile extrusion, in addition to the benefits mentioned above, the improvement of insulation properties and the optimisation of damping behaviour must be highlighted.

The use of foaming agents in the production of thermoforming and blown films produces an improved stiffness-to-weight ratio with a significant reduction in density.

Each formulation of our foaming agents has been tried and tested in the field for the field. We have the portfolio, you have the choice.

Our AF-Complex® foaming agent masterbatches

Product	Function/application	Suitable for
PE 990199 TM natur	Developed to prevent sink marks	PE, PP, PA
PE 990300 TM natur	Developed for a fine-cell foam structure Foaming of thin films	PE, PP, PA
PE 990477 TM natur	Developed for thin foamed films and tapes Fine-cell and smooth foam structure	PE, PP, PA
EBA 990209 TM natur	Developed for injection moulding and extrusion applications Suppression of hydrolysis	Universally applicable, e.g. PE, PP, PA, PLA (biodegradable plastic)
PA 990906 TM natur	Developed for injection mouldingDensity reduction of up to 40 %Suppression of hydrolysis	Tailor made for polyamides (PA)

Disclaimer: This information represents the current state of our knowledge and serves as a guide only to our products and their potential applications. Liability for specific properties or suitability for any concrete operational purpose may not be assumed from the information provided. Our information and data do not free the processor and user of his or her obligation to conduct their own trials and tests for specific applications. AF-Carbon®, AF-Color®, AF-Clean®, AF-Circolor®, AF-C

