

AF-Color®

Masterbatches individuality
for your needs

AF-COLOR
Branch of AKRO-PLASTIC GmbH

Industriegebiet Scheid 27
56651 Niederzissen
Germany
Phone: +49(0)2636-8092-0
Fax: +49(0)2636-8092-31
info@af-color.com
www.af-color.com

09/2023

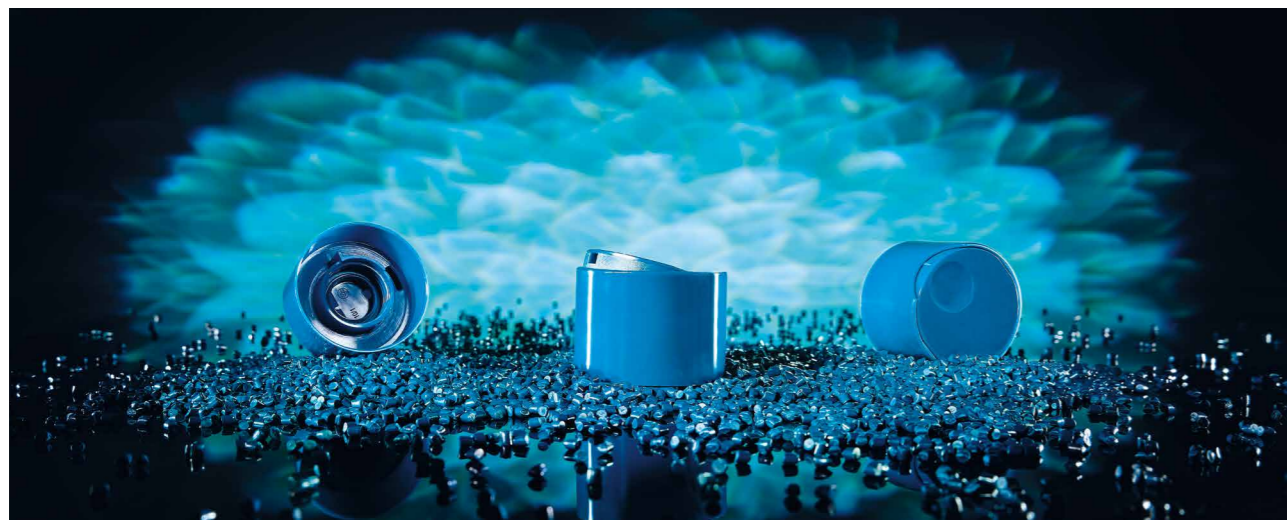
 **AF-COLOR**
MASTERBATCHES

AF-COLOR – Customer-focused masterbatch expertise within the corporate alliance of the Feddersen Group

AF-COLOR means high-quality technical masterbatches. As a branch of AKRO-PLASTIC GmbH located in Niederrissen, we make use of synergy effects resulting from our compounding expertise in research, development and production technologies to create successful solutions which meet our customers' requirements.

From plastics trade to processing:

- 1949** Karl Detlef Feddersen establishes K.D. Feddersen & Co., specialising in the distribution of chemical products.
- 1955** Plastics have been included in K.D. Feddersen's product range.
- 1958** Foundation of K.D. Feddersen Foundation and passing of Karl Detlef Feddersen. Today the K.D. Feddersen Foundation is the sole shareholder of K.D. Feddersen Holding GmbH, which owns the companies of the Feddersen Group since 1985.
- 1988** Acquisition of Plastikverarbeitung Eich, industrial area Scheid. 1991 renamed by merger with the AKRO-PLASTIC GmbH.
- 2002** AKRO-PLASTIC GmbH applies the newly built site in the industrial area Brohltal-Ost.
- 2004** AKRO-PLASTIC GmbH establishes AKRO Engineering Plastics (Suzhou) Co., Ltd. as manufacturing base in Suzhou/China. Today this business runs as a joint venture Highsun AKRO Engineering Materials in Changzhou/China.
- 2004** Foundation of AF-COLOR as a branch of AKRO-PLASTIC GmbH.
- 2012** AKRO-PLASTIC GmbH opened the 2nd production hall in the industrial area Brohltal-Ost now with double production capacity.
- 2014** Foundation of AKRO-PLASTIC do Brasil Indústria e Comércio de Polímeros de Desempenho Ltda. in São Paulo/Brazil and BIO-FED as a branch of AKRO-PLASTIC GmbH.



Since 2004, AF-COLOR has been the specialist in masterbatch production in its own name within the international corporate alliance of the Feddersen Group.

In previous years, the company has continuously invested in the expansion and further development of environmentally friendly production facilities and in important divisions such as R&D, logistics and sales. In all industries with their varied requirement profiles, we currently rank alongside renowned suppliers of high-end masterbatches thanks to our state-of-the-art production facilities. The standards we provide are in line with our DQS-certified processes. Our production capacities change continually in response to increasing market demand.

Our goal is to be one of the best in the industry. This encompasses environmental aspects, just as much as it involves our highly trained, highly motivated employees – from the production line right through to the company's entire service chain. Only then do we achieve our high degree of flexibility, whilst maintaining a high level of product quality and productivity aimed at meeting our customers' high standards.

Under the name AF-Eco® name, we produce masterbatches based on fully biodegradable*, compostable carriers in which nearly 84 % of the carrier polymer's carbon content is based on renewable resources.

* Fully biodegradable under aerobic conditions in accordance with ASTM D5209-91 and DIN EN 13432



Extrusion line with flexible process length and optional strand or underwater pelletising.



To guarantee a continuous product quality is in focus of our outgoing inspection.

AF-Color® – Customised solutions for high standards

Color defines our life and is an important factor in innovative product design. Color requirements and technical requirements play an increasingly important role. All our efforts are focussed on meeting our customers' needs with our knowledge and the latest technical innovations.



AF-COLOR customers have access to a comprehensive masterbatch color programme for a host of standard solutions.

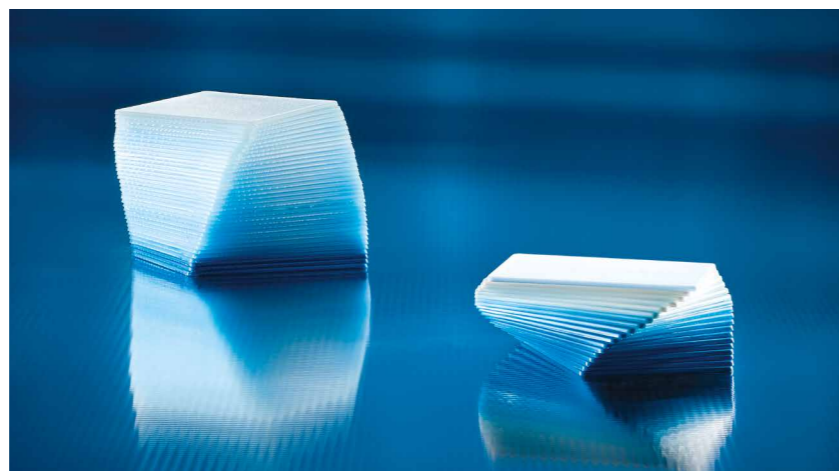
But the service that sets us apart is providing tailor-made, customer-focused solutions for precise color demands and high technical standards and supplying these in small quantities manufactured with production requirements in mind.

Masterbatches are offered and produced in all common carrier materials and engineering thermoplastics, including PA, PBT and PPS.

Effects such as metallic, transparent, flakes, fluorescent, phosphorescent, grain, mother of pearl, interference, multicolor, marbling, wood effect and thermochromatic are also part of our scope of supply.



In addition to a good eye, it takes skill to develop appropriate solutions for special projects.



AF-Carbon® – Just as important as all the colors in the world

With our AF-Carbon® product range, we offer our customers a comprehensive portfolio of technically sophisticated carbon black concentrates.

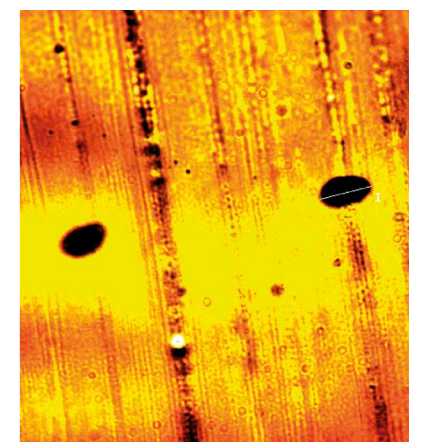
In various industries, different carbon blacks are used for varied applications.



Maximum dispersal quality for optimal retention of mechanical properties in injection-moulded components and high-end applications in the film industry.

With our latest eco-friendly production facilities, we have assumed an even stronger standing, particularly in the area of carbon black concentrates. Technically complex batches are developed for our customers and offered in a wide range of carrier materials. Proper dispersion is an essential aspect of this, as it allows us to realise special, industry-specific requirements such as minimal agglomerate size in the finished product.

In the accredited test laboratory located at AKRO-PLASTIC, a number of technical aspects can be inspected and tested for maximum customer satisfaction.



Carbon black agglomerate testing by means of interference stereo-microscopy.

AF-Complex® – Customised masterbatch performance

As individual as the needs of our customers. In our AF-Complex® product family, various additive combinations are available to suit the desired technical requirements and color requirements.

AF-Complex® represents a complete additive programme of finely tuned performance comprising the following applications:

- Process and long-term thermal stabilisation
- UV stabilisation
- UV filters/IR filters
- Lubricant/slip functions
- Antistatic surface treatment
- Antiblock and matting
- Nucleation/clarifiers
- Blowing agents
- Biostatics/hygiene
- Process stabilisation
- Antifog
- Lasers (labelling, welding)
- Impact modifiers
- Flame retardant



We create professional solutions that meet every of your individual requirements.

These products are suitable for use in injection moulding as well as for film, profile and sheet extrusion and thermoform applications. Application-specific combination

products and special products tailored for customer-specific needs are available following application support consulting.



Maximum PP transparency through the use of clarifier concentrates optimised for extrusion or injection moulding processes.

AF-Eco® – Sustainable products for environmental compatibility

AF-COLOR has developed the new AF-Eco® product range based on biodegradable materials specifically for these applications.



The coloration of biopolymers is growing in importance and is accomplished today almost exclusively using color masterbatches made up of polymer carrier materials and corresponding colorants. For its bio-based color and additive masterbatches, AF-COLOR uses exclusively biodegradable and bio-based polyesters as carrier matrix.

The defining standard in Europe is DIN EN 13432, within which the relevant suppliers must manoeuvre by means of relevant testing. The certification authorities themselves (Vinçotte, DIN CERTCO) have designated laboratories which carry out corresponding tests. The content of non-biodegradable filler materials is limited by DIN EN 13432 to 5 %,



maximum, or 1 % for each individual filler material. The heavy-metal content, primarily in packaging ap-

plications, is also regulated within this standard.



A study published by the "Organic Waste Systems Institute" in Belgium shows that plastic bags made of M-VERA® B5010 with a wall thickness of 288 µm are completely decomposed by bacteria within 12 weeks.

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. AKROMID®, AKROLEN®, AKROLOY®, AKROTEK®, PRECITE®, AF-Carbon®, AF-Color®, AF-Complex®, AF-Clean®, ICX®, BIO-FED®, M-VERA® and AF-Eco® are registered or applied trademarks of the Feddersen Group.