



ZEOCHEM®

ZEOflair®

a New Additive for the Removal of
Undesirable Odours and Flavours





Polymers often contain small amounts of low molecular weight organic substances originating from their manufacture and processing that may lead to undesirable characteristics and even health impediments.

In order to eliminate this effect, Zeochem has developed the plastic additive **ZEOflair®**. This product line covers presently the products **ZEOflair® 100, 200, and 300**.

Product Properties

ZEOflair® is a white, microporous, organophilic inorganic powder with a large adsorption capacity for odours and flavours, and other organic compounds. Its high adsorption capacity is maintained even after it has been incorporated into the polymer matrix.

ZEOflair® adsorbs the substances directly within the polymer and binds them by trapping within the crystal structure. In contrast to alternatives, the unpleasant plastic smell or taste is not masked by other odours or flavours, but effectively eliminated.

Essential properties of **ZEOflair®**

- high adsorption capacity for organic substances
- white, odourless, and tasteless inorganic powder
- thermally stable (up to 1000 °C)
- chemically inert
- hydrophobic
- free of organic components (non toxic)
- suitable for materials in contact with food products

The following is a list of typical examples of organic substances that can be adsorbed by **ZEOflair®**

- residual monomers
- decomposition products
- ketones
- aldehydes
- esters
- organic acids
- organic compounds containing sulphur and nitrogen

Due to its hydrophobic nature **ZEOflair®** does only adsorb marginal amounts of water.

Fields of application

ZEOflair® mostly added to master batches and is suitable for the following applications:

Food industry:

Drinking water pipes, food packaging, bottles for beverages, bottle caps, food containers, etc.

Textile industry:

Textile fibers, carpeting, etc.

Automotive industry:

Vehicle interiors

Furniture industry:

Laminates, adhesives, etc.

Miscellaneous:

Plastic toys, paints (acrylic), recycling plastics, etc.



Incorporation into plastics

ZEOflair® can be incorporated in all common polymers by means of master batches or dry blends. Based on experience we recommend a concentration of 0.1 to 0.5 wt. % in the end product. However, depending on the application, lower or higher concentrations may be required.

In the special case of carbon black master batches for drinking water pipes 0.5 wt. % **ZEOflair®** is sufficient, which leads to a concentration of 0.03 wt. % in the finished HDPE drinking water pipe.

ZEOflair® is suitable for the processing technologies of extrusion including film products, injection, and blow moulding.

Services

ZEOflair® extends our comprehensive range of additives for the plastics industry. Using our long-standing know-how and our extensive experience in application technologies within our product line **PURMOL®** for polyurethane applications, we support our customers by laboratory testing and advise them in optimising their products.

Technical Data (typical values)

Parameter	ZEOflair® 100	ZEOflair® 200	ZEOflair® 300
Mean particle size (d50, in µm)	2 - 4	2 - 4	2 - 4
Bulk density (in g/l)	600	300	370
Appearance, form	white powder	white powder	white powder
LOI (wt.%, 1000 °C)	3	3	3
Pore volume (ml/g)	ca. 0.2 - 0.3	ca. 0.2 - 0.3	ca. 0.2 - 0.3
Poison class	non toxic	non toxic	non toxic
Container size in kg (net)	20, 90, 500	10, 60, 300	15, 70, 350

- Technical data sheets and EC safety data sheet available.

Would you like to receive further information?

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