Data Sheet Issue 01/2016

BYKO2BLOCK-1200

Barrier additive to reduce gas permeability in packaging films

Product Data

Composition

Modified aluminum-magnesium clay

Typical Properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Moisture: < 3 %

Typical Dry Particle Size: < 50 µm (d50) Color: Off white Packed Bulk Density: 575 g/l

Food Contact Legal Status

For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

Storage and Transportation

Store dry.

Applications

Thermoplastics

Recommended Use

BYKO2BLOCK-1200 can be used in films based on biopolymers such as PLA, but it can be also used for other polymers which are used for films, e.g. in the packaging industry.

Polymers, such as PLA (Polylactide) are used more and more as a substitute for conventional polymers like Polypropylene or Polyethylene in the packaging industry due to their green footprint. A significant area of improvement when using PLA for packaging films is the considerably greater permeability for gases such as O_2 and water vapor. BYKO2BLOCK-1200 was developed to reduce the gas permeability of these polymers. The platelet-shaped particles formed during the compounding create a so-called winding pathway for the gases, thereby reducing this the permeability.

Recommended Levels

3-5 % as supplied based on the total formulation

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

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Incorporation and Processing Instructions

To make use of the full performance of BYKO2BLOCK-1200, a complete exfoliation of the clay particles is necessary. To realize this, special care should be taken during the compounding. The use of concurrent, parallel screw extruders, co-rotating-twin-screw-extruders (L/D > 40) or buss kneaders is highly recommended to ensure a perfect exfoliation and distribution of the clay particles. In some cases, it is recommend to prepare concentrates of BYKO2BLOCK-1200 up to 15-20 % so as to ensure a good exfoliation of the platelet-shaped filler.

Special Note

For further support regarding processing conditions please contact Jochen.Wilms@altana.com.







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