



**Grilon (C)
Masterbatch Additives drive
Films to Top Speed**

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EMS

Additives boost productivity

With Grilon special additives, polyamide films can be produced faster and the cycle times in downstream processing reduced. In principle: there are two active systems: antiblock agents with additional lubricant effect and lubricants with additional antiblock action (table with selected examples).

Antiblock with immediate effect

The antiblock lubricant systems lead to speedier and more regular crystallization during film production, thereby reducing the proneness of sticking and enabling faster production. At the same time the additives bring about a microfine topography on the film surface, which reduces direct surface contact with other surfaces. Consequently the coefficient of friction of the films is lowered (Diagram), allowing higher running speeds on extrusion lines and automatic packaging machinery. Furthermore the mechanical properties of the film can be improved by the enhanced crystallinity.

Super antifriction properties for wide-ranging applications

That it takes time to do a job properly is an old adage, and so is it that it takes a little time before the copolyamide-based

additive Grilon C MB 7361 achieves full effectiveness. Depending on storage conditions, full effectiveness is attained within one to two weeks. During this time a waxlike substance migrates to the film surface, where it induces outstanding antifriction properties without detriment to the transparency. By adding 2% masterbatch, the coefficient of friction of polyamide 6 can almost be halved (see diagram). Furthermore, the copolyamide masterbatch is suitable for improving the properties of many kinds of polyamide film with melt temperatures starting at 130 °C.

Properties improved without compromises

Unlike conventional additives, Grilon masterbatches are based on polyamide 6 or copolyamides, and are fully compatible with the polyamide film material.

The enhanced antifriction properties do not require other product properties to be sacrificed. Properties such as optics, barrier and temperature stability remain unchanged with the addition of our masterbatches.

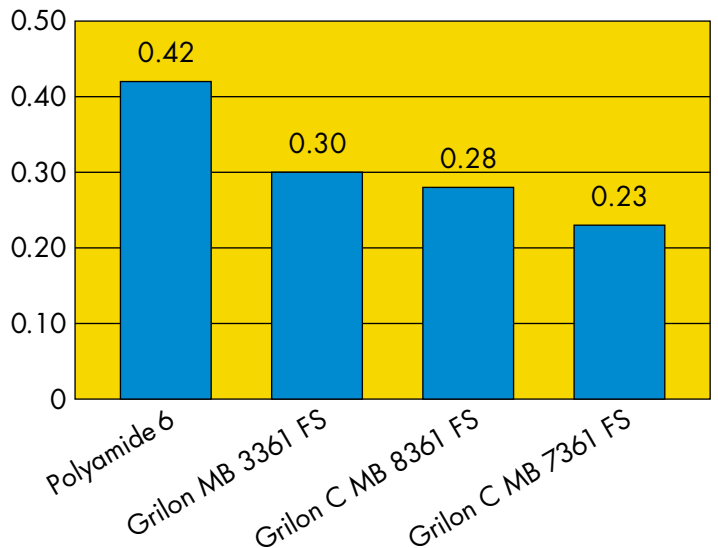
The majority of the Grilon masterbatch products are approved for direct food contact. Also available are special caprolactam-free additives for medical applications.

Grilon (C) Masterbatch Products

	Grilon MB 3361 FS	Grilon C MB 8361 FS	Grilon C MB 7361 FS
PA 6	😊😊😊	😊😊😊	😊😊😊
PA 12			😊😊😊
CoPA – 190 °C		😊😊	😊😊😊
CoPA – 150 °C			😊😊😊
CoPA – 130 °C			😊😊😊
Amorph. CoPA*	😊😊	😊😊	😊

*e.g. Grivory G16/G21 😊😊😊 = excellent 😊😊 = good 😊 = possible

Dynamic Coefficients of Friction for Polyamide 6 with 2% Masterbatch



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