ADDiTIVES
for flexible films

STANDARD
ADDITIVES

FOR ALL KINDS
OF PACKAGING

STRONG
BUT FLEXIBLE
FOR EVERY DAY USE

ADDiTiVES FOR FLEXiBLE PACKAGiNG
**Industrial Packaging**
- Pallet shrink films (thermal shrink)
- Pallet stretch hoods (cold shrink)
- Bags
- Weld line bags
- Stretch wrap films for pallet or single items
- Air bubble films

**Household & Consumer Goods**
- Bags and shopping bags
- Household waste bags
- Stretch wrap films

**Food Wrapping & Packaging**
- Bags
- Lid films (for ready food)
- Wrap stretch films
- Barrier films, co-extruded (aroma or gas barrier)
FREQUENTLY USED ADDITIVES

MAXITHEN® HP7041/05AS
- Amine-based, non-ionic, antistatic masterbatch
- Frequently used for heavy duty bags and pallet shrink films
- Recommended dosage rate for trials are 1–2% for LDPE/LLDPE film and 1.5–3.0% for HDPE film
- The maximum surface resistance to be achieved is approx. 10E9 Ohm
- Suitable for processing temperatures of up to 240°C
- Can be used for food packaging articles according to EU 10/2011
- Detailed regulatory information can be provided upon request

MAXITHEN® HP77571AS
- Amide-based, non-ionic, antistatic masterbatch
- Designed to be used especially in LLDPE, LDPE and HDPE, when good printability is required
- Suitable for corrosion-sensitive goods (e.g. electronics)
- Recommended dosage rate for trials is 1–3 %
- The maximum surface resistance to be achieved is approx.10E9 Ohm
- With regard to 3-layer COEX film, we recommend the addition of 1–2% AS-MB in outer layers and 1% AS MB in the core layer
- MAXITHEN® HP77571AS can be used for food packaging articles, according to EU 10/2011
- Detailed regulatory information can be provided upon request

MAXITHEN® HP7AA5370AS
- Permanently antistatic masterbatch, non-migrating, with immediate and long-term antistatic effect
- Recommended dosage rate is 15–25% in order to achieve a permanent antistatic effect
- Depending on the surface resistance of the polymer, around 10E10 Ohm can be achieved
- Not suitable for use in food packaging articles

MAXITHEN® HP7AA5800AS
- Permanently antistatic masterbatch, non-migrating, with immediate and long-term antistatic effect
- Recommended dosage rate is 15–25% in order to achieve a permanent antistatic effect
- Depending on the surface resistance of the polymer, around 10E10 Ohm can be achieved
- Suitable for use in food packaging articles
SLiP MASTERBATCH

**MAXITHEN® HP7051E**
- Contains erucamide slip agent, slow migrating (blooming) and provides a longer lasting slip effect.
- Product is suitable for processing temperatures of up to 260°C.
- Recommended dosage rate for trials is 0.5-2%.
- With regard to 3-layer COEX film, we recommend the addition of 1-2% GL-MB in outer layers and 1% in the core layer.
- Can be used for food packaging articles according to EU 10/2011.
- Detailed regulatory information can be provided upon request.

**MAXITHEN® HP7011AB**
**MAXITHEN® HP7011/65AB** (higher concentrated version)
- These products contain 50% or 65% natural silica.
- These products are recommended for use in conventional polyethylene film.
- Film thickness not less than 50µm.
- Typical dosage rate is 1–3%.

**MAXITHEN® HP7A8080AB**
- Contains 50% natural silica with a larger particle size.
- Enables higher static coefficient of friction (COF) values on the film’s surface, which is of special interest for some industrial packaging film issues.
- Film thickness not less than 50µm.
- Typical dosage rate is 1–3%.

**MAXITHEN® HP79530AB**
- Contains highly dispersed, micronised synthetic silica.
- Suitable for use in very thin films (< 50µm) or for films where high transparency, clarity or low haze is required.
- Typical dosage rate is 1–2%.

**MAXITHEN® HP7081ABGLE**
- Combination of natural silica antiblock and erucamide slip masterbatch.
- To be used for the production of PE-film with a wall thickness of more than 50µm.
- Typical dosage rate is between 1-3%.

Our Antiblock products are suitable for use in food packaging articles, according to EU 10/2011. Detailed regulatory information can be provided upon request.
**FREQUENTLY USED ADDITIVES**

**ANTIFOG MASTERBATCH**

**MAXITHEN® HP792470AF**
- Contains a surface-active additive and is primarily used for packaging films in cold-fog and hot-fog applications to prevent the condensation of steam in the form of small droplets and to support the formation of a thin, translucent film of water.
- Dosage proposal: start with 5% HP792470AF, a reduction to 3% is sometimes possible depending on the particular polymer grade in use. For COEX film, a detailed dosage proposal can be provided upon request.
- Can be used for food packaging articles, according to EU 10/2011
- Detailed regulatory information can be provided upon request.

**ANTILAMINATE MASTERBATCH**

**MAXITHEN® HP72670GL**
- Antilaminate masterbatch is used to prevent the thermo-shrink film LDPE or LLDPE from sticking to the PE packaging material of packed goods underneath.
- Also suitable for (cold) stretch hood films made from LDPE or LLDPE, in order to achieve better sliding behaviour in the stretch machinery equipment.
- In three-layer COEX applications, it must always be used in the layer in which the slip effect or anti-laminate effect has to be developed. In tubular stretch hood and thermo-shrink film, this is always the inner layer.

**POLYMER PROCESSING AID**

**MAXITHEN® HP7A8770PPA**
- Contains fluoroelastomer, works against the formation of sharkskin on the surface of LLDPE film caused by melt fracture during extrusion of the film, and protects against layer build-up inside the extruder and nozzle.
- Usage: Impregnating dosage 5% for first 30 minutes of production in order to condition the machine, then reduced to 1% to maintain the effects.
LIGHT STABILISER
MASTERBATCH

MAXITHEN® HP79860UV
- Contains highly effective HALS (Hindered Amine Light Stabiliser).
- Suitable for the UV stabilisation of several polyolefin films.
- The dosage rate depends on the polymer type used, film thickness, desired service life and area of application. We can provide appropriate dosage recommendations upon request.
- Can be used for food packaging articles, according to EU 10/2011.
- Detailed regulatory information can be provided upon request.

MAXITHEN® HP796230UV
- Contains a highly effective HALS (Hindered Amine Light Stabiliser) for superior long-term thermal and improved process stability.
- Provides excellent stabilisation for articles exposed to higher temperatures.
- The dosage rate depends on the polymer type used, film thickness, desired service life and area of application. We can provide appropriate dosage recommendations upon request.
- Can be used for food packaging articles, according to EU 10/2011.
- Detailed regulatory information can be provided upon request.

UV ABSORBER
MASTERBATCH

MAXITHEN® HP7790UV
- UV absorber for PE films, in order to protect the packaged goods against UV radiation.
- Gives UV-blocking effects at UV wavelengths of between 250 and 340nm.
- The maximum UV absorption wavelength is around 340nm.

MAXITHEN® HP793700C12UV
- UV absorber for PE films, in order to protect the packaged goods against UV radiation, with long-lasting UV absorption properties.
- Gives UV-blocking effects at UV wavelengths of between 250 and 380nm.
- The maximum UV absorption wavelength is around 380nm.
- With regard to 3-layer COEX film, we recommend dosage in all layers, for the best possible economy in relation to the UV absorbing effect.

The above UV absorber products can be used for food packaging articles, according to EU 10/2011. Detailed regulatory information can be provided upon request.

All information in this product overview is intended as a guide only and should not be construed as guaranteeing specific properties or suitability for a particular application. Trials by customers using their own polymers and production conditions are recommended.
BUSINESS UNITS OF GABRIEL-CHEMIE GROUP:

- Building & Agriculture
- Home & Lifestyle
- Packaging for Industrial & Consumer Goods
- Cosmetics Packaging
- Food & Beverage Packaging
- Medical

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