



**Rolling to success with Kafrit Group
Masterbatches and Compounds**

PE

 **CONSTAB CN**

Working together for the future of plastics.



Kafrit Group is a leading producer of Masterbatches and Compounds for the plastics industry and currently employs more than 470 people. In 2021, the Group achieved USD 302 million \$ turnover with an available capacity of more than 120,000 MT. Moreover, the company is active on a global scale and has set up production sites all over the world.

All of this began in 1973 when the company was founded in Israel. Since then, the company has grown primarily via acquisition.

Today, the Kafrit Group incorporates **Kafrit Industries (1993) Ltd. in Israel, CONSTAB Polyolefin Additives GmbH in Germany, China's Suzhou Constab Engineering Plastics Co. LTD, Polyfil Inc. in the USA, the Canada-based Kafrit NA Ltd. and Addvanze AB in Sweden.** With more than 50 years of experience in the plastics processing industry, the company can draw on high levels of expertise and technical know-how. Kafrit Group places a high value on sustainability and has made it to one of the cornerstones of our corporate strategy.

Our unbridled dedication to environmental, social and financial issues makes us to one of the leading business partners in the plastics industry. Our customers value our passion and appreciate our ecological awareness and social commitment. Moreover, they recognize our world leading services and consider our products as among the best within our industry.

We develop and produce cost-efficient solutions which will enhance the completion of high-quality end products in many areas of the plastics industry, such as packaging films (BOPP, BOPE, CPP, PE), PC sheet, agricultural films and derivatives, biopolymers, flame retardant applications, PEX, pipes, fibers and nonwovens.

-  KAFRIT IL ①
-  CONSTAB GER ②
-  CONSTAB CN ③
-  KAFRIT NA ④
-  POLYFIL USA ⑤
-  ADDVANZE SWE ⑥
-  DELTA KUNSTSTOFFE GER ⑦
-  ABSA RESINS CAN ⑧



● Kafrit Group production sites ● Agencies/Distribution

Our Purpose

Unite talent and technology to drive the future of plastics, together.

This purpose is the driving force of our organization. The reason we do what we do, why we come to work every day. And although our group is made of many different Companies around the world, our purpose unites us.

These three pillars support our purpose

TOGETHER TO THE FUTURE

The world doesn't stand still, and nor do we. We're always looking ahead, searching for new ways to sustainably grow and thrive. To push our technology and keep working on the next generation of solutions to benefit our customers. Working together in perfect synergy to achieve something great, today and tomorrow.

TALENT

Around the world, we have hundreds of talented colleagues and partners. All with unique skills, multidisciplinary knowledge, and deep industry experience. Innovators with brilliant ideas and the drive to see them through. People striving for excellence in everything they do.

TECHNOLOGY

After decades in the plastics industry, we have more than high levels of expertise, a strong focus on customer service, and vast technical knowledge. We also have a burning passion for innovation and transformation. A passion that drives us to seek out new solutions, new machinery, and fresh ways to give our customers just what they need.

Together we have the power to drive the future of plastics – within our community and around the world. And we'll keep doing it, today, tomorrow and always.

But the real magic happens when we work together. There's a spark, an energy. A belief that anything is possible. And that's how we provide the best solutions for our customers.

And with the latest technology in our hands and new innovations within our grasp, there's only one question. How far can we go?

Defining new production goals

Experience the new high performance products

Research that takes us to the top

Throughout our company history, research and development have always been a key area of our expertise. Kafrit employs a staff of more than 470 people that work on innovative products and make use of our vast pool of knowledge that we developed in 50 years of experience in the plastics industry. Our experts optimize and develop additive concentrates, flame retardants, color concentrates, and compounds for various applications.

Kafrit enjoys a close partnership with renowned research institutions at the Shenkar University in Israel and at different universities in Germany. Moreover, we maintain a strong co-operation with well-known suppliers including machine manufacturers that do recommend our products for use in combination with their machines.

About Us

Forging ahead for 25 years, Suzhou Constab Engineering Plastics Co., Ltd. has been a leading manufacturer of masterbatches additives for plastic films and PEX (silane cross-linked polyethylene) in Asia Pacific. Founded in 1999, our company, as a member of Constab Group from Germany, has been committed to producing and developing high quality materbatches. In 2003, we had another chance to be part of Silon International whose high-tech and know-how supported us to be the leading company of PEX industry in China. In 2008, CONSTAB was acquired by the Kafrit Group. Our PEX and masterbatches and those of the entire Kafrit Group are now traded all over the world. The main applications of materbatches are BOPP, CPP, PE, agricultural and other packaging films, and PEX is mainly applied for temperature resistance piping systems.

Leading analysis of research and development together with devoted technical service enable us to have a better understanding of our clients' demands. We have been committed to integrated solutions for films and pipes manufacturers, which can expand the application fields of your end products. In addition, your fully trust and close cooperation with us will help improve product performance and diversify our products. With the stable, accurate and efficient products, better service in CONSTAB CN is waiting for you.

With the opening of new plant, CONSTAB CN is working together with you for the future of plastics!

Our Purpose

To unite talent and technology
To drive the future of plastics,
Together.

Our Mission

To provide best quality products and most suitable solutions
To provide high-level customer service and technical support
To develop professional staffs with health and safety
To create great future of plastics with sustainability



Overview of Advanced Lab Equipments

FTIR and Melting point apparatus



Nitrogen and Sulfur analyzer



Particle size analyzer



FTIR



Microwave muffle



Cast film



Applicaiton Field



BOPP&CPP



BOPE



PE



PEX



POF

Product Features

- Antiblock
- Slip
- Slip antiblock
- Nucleate
- Antistatic
- Slip antistatic
- Antifog
- Matte compounds
- Processing aids
- Heat Stabilizer
- UV block
- Light stabilizer
- Polymer Modification
- CONSLIP® Products
- PEX

Honor Certificate

ISO 9001 Quality Management System,
ISO 14001 Environmental Management System certifications
ISO 45001 Occupational Health and Safety Management System

1 Antiblocking Masterbatches

Product	Active Concentration	Description	Proposed Let Down Rate(%)
AB 6001LD*	10%	Standard product based on synthetic silica; common packaging film	1.0 - 2.0
AB 6043LD	15%	Standard products based on natural silica; applied for thick plastics films	1.0 - 3.0
AB 6074LD*	10%	Standard product based on synthetic silica; common packaging film; applied for thick plastics films	1.0 - 2.0
AB 6114LD	20%	Standard products based on natural silicates achieve a good balance between antiblocking and haze	1.0 - 1.5
AB 6010LD	10%	Inorganic synthetic zeolite antiblocking agent; round particle; used for films or metallized films with high transparency requirements	2.0 - 5.0
AB 6084LD**	7.5%	Organic antiblocking agent; with non-migratory slip effect	3.0 - 5.0
AB 6085LD**	10%	Organic antiblocking agent; with non-migratory slip effect	3.0 - 5.0
AB 6304LD	30%	Natural silica; low haze; high-cost performance; common packaging film	1.0 - 2.0

* Compared to natural silica, these products have good antiblocking and optical properties (haze, gloss).

** The product gives the film a certain slip.

2 Slip Masterbatches

2.1 Standard Grades

Product	Active Concentration	Description	Proposed Let Down Rate(%)
SL 5004LD	5%	Standard grade; containing high pure amide; slow migration; suitable for high operating temperatures	1.0 - 5.0
SL 5067LD	10%	Standard grade; containing high purity special amide; fast migration	1.0 - 3.0
SL 5068LD	10%	Standard grade; containing high pure amide; slow migration; suitable for high operating temperatures	1.0 - 2.5
SL 5060LD	7.5%	Standard grade; containing high pure amide; slow migration; suitable for high operating temperatures	1.0 - 4.0
SL 5008LD	8%	Standard grade; containing high purity special amide; fast migration	1.0 - 4.0

2.2 Super- Slip Grades

Product	Description	Proposed Let Down Rate(%)
SL 5000LD	Super slip masterbatch; non-migration silicone slip agent be used in the skin layer of films	4.0 - 10.0
SL 5010LD	Super slip masterbatch; non-migration silicone slip agent be used in the skin layer of films	4.0 - 10.0
SL 5077LD	Super slip masterbatch; non-migration high molecular weight silicone slip agent; used for skin layer of films	5.0 - 10.0

The above products are only added to the surface of the co-extruded film, the film is especially suitable for high-speed packaging, with high temperature slip effect.

The masterbatch can enhance the antiblocking effect of the film. If the ideal antiblocking effect is expected, it is necessary to add additional antiblocking masterbatch.

⚠ One important note:

The film containing the masterbatch on the surface is not recommended for printing, because excessive migration of the smoothing agent will affect the heat-sealing performance of the film, so it is not necessary to carry out corona or flame treatment.



3 Combined Slip / Antiblocking Masterbatches

Product	Description	Proposed Let Down Rate(%)
SAB 6509LD	Standard grade; containing 5% synthetic silica and 5% erucamide; it achieves a good balance between block resistance and haze degree	2.0 - 5.0
SAB 6537LD	Standard grade; containing 5% synthetic silica and 5% erucamide; applied for thick plastics films	2.0 - 5.0
SAB 6508LD	Combination of natural silica and erucamide; long-term slip effect	1.0 - 3.0
SAB 6525LD	Combined of natural silicate and erucamide; better transparency	1.5 - 2.0

4 Antistatic Masterbatches

Product	Description	Proposed Let Down Rate(%)
AT 4001LD	Long term antistatic agent; without GMS	1.0 - 3.0
AT 4003LD	Fast migration combined antistatic agent	1.0 - 2.5
AT 4072LD	Fast migration combined antistatic agent	1.0 - 2.5
AT 4026LD	Fast migration combined antistatic agent; free amine; suitable for powder and electronic product packaging	1.0 - 5.0
AT 4055LD	Fast migration combined antistatic agent; free amine; suitable for electronic product packaging	1.0 - 3.0
AT 4131LD	Special antistatic agent; free amine; suitable for electronic packaging film	1.0 - 3.0
AT 4132 UNI	Permanent antistatic masterbatch; suitable for electronic packaging film	10.0 - 20.0

5 Antifogging Masterbatches

Product	Description	Proposed Let Down Rate(%)
AF 0252LD	Suitable for cold fog and hot fog; especially for hot fog; lamination film; according to the EU and FDA approval	8.0 - 15.0
AF 0290LD	Excellent protection against cold fog and hot fog; especially for cold fog; barrier film; according to the EU and FDA approval	6.0 - 10.0
AF 0291LD	Excellent protection against cold fog and hot fog; especially for cold fog; preservation film; according to the EU and FDA approval	6.0 - 10.0

6 Processing Aid Masterbatches

Product	Description	Proposed Let Down Rate(%)
PA 0892LD	Eliminate melt fracture; reduce die build-up and gel formation; reduce extrusion pressure; suitable for high temperature processing	0.5 - 2.0
PA 0801LD	Eliminate melt fracture; reduce die build-up; especially suitable for film formulations containing inorganic fillers	1.0 - 2.0
PA 0841LD	Eliminate melt fracture; reduce die build-up; especially suitable for film formulations containing inorganic fillers	1.0 - 3.0
PA 0856LD	Eliminate melt fracture; reduce die build-up and gel formation; reduce extrusion pressure; especially suitable for films containing light stabilizers	0.5 - 3.0
PA 0890LD	Eliminate melt fracture; reduce die build-up and gel formation; reduce extrusion pressure; low add-on	0.5 - 2.0
PA 0895LD	Eliminate melt fracture; reduce die build-up and gel formation; reduce extrusion pressure; low add-on	0.5 - 2.0
PA 0897LD	Eliminate melt fracture; reduce die build-up and gel formation; reduce extrusion pressure; low add-on	1.0 - 3.0

Processing additives masterbatch is commonly used to improve the flow of melt, especially when LLDPE is used in film processing, to increase the output of the extruder and improve the melt fracture of the film, reduce the die build-up and die lip line. Die deposits are usually formed for the following reasons:

- Broken low molecular weight carbon chains in resins.
- Extruded species filling or pigment concentration is too high.
- Volatile substances in additives

7 Heat /Processing Stabilizer Masterbatches

Product	Description	Proposed Let Down Rate(%)
ST 3003LD	Combined primary and secondary antioxidant. * Improve processing and long-term thermal stability ** Recycling and reprocessing of film scraps *** Increase the stability of the polymer when the extrusion process is stopped	* 1.0 - 3.0 ** 0.5 - 1.5 *** 5.0 - 10.0
ST 3059LD	Combined primary and secondary antioxidant; reduces gel formation and prevents material carbonization	1.0 - 3.0
ST 3077LD	Combined primary and secondary antioxidant; reduces gel formation and prevents material carbonization	1.0 - 3.0

8 Light Stabilized Masterbatch

Product	Description	Proposed Let Down Rate(%)
UV 1020LD	Polymerically hindered amine light stabilizer, recommended for films requiring outdoor weather resistance High effective in combination with carbon black will not interfere with welding	1.0 - 6.0
UV 1022LD	Polymerically hindered amine light stabilizer, recommended for films requiring outdoor weather resistance	1.0 - 6.0

The optimal addition of masterbatch depends on climatic conditions (climate zone/season) as well as the formulation process for making the film, such as thickness, film structure, resin used, etc.

If necessary, it is recommended to contact our customer technical service department for the best addition amount of UV stabilized masterbatch.

9 UV Absorbent Masterbatch

Product	Description	Proposed Let Down Rate(%)
UV 1020LD	Organic UV absorber; especially suitable for absorbing UV-B UV light (wavelength 280-315nm) plastics films	2.0 - 6.0
UV 1034LD	Special UV absorber; especially suitable for film packaging of light sensitive items; has A good barrier effect on absorbing UV-B and UV-A UV light; and can be used for transparent UV blocking films	1.5 - 6.0
UV 10456LD	Special UV absorbent; especially suitable for film packaging of light sensitive items; recommended for high UV barrier film	1.5 - 6.0

According to the thickness of the film, UV Absorption Masterbatch can only contribute to a limited UV light stability. There before in the most cases UV Light Stabilizers must be applied if the film needs also outdoor weathering resistance.



Please request for further information:

 **BOPP**
Optimizing BOPP film production
with CONSTAB® Masterbatches and Compounds

 **BOPE**
Sustainable solutions for flexible packaging films
with CONSTAB® CON-X® Masterbatches

 **Functionalities: Ecocell® – Lighten up!**
A revolutionary foaming agent
to reduce material and resin consumption

 **Functionalities: Kafrit Group Antioxidants**
Reliable protection for your plastic products

 **Functionalities: Conpeel**
Strong protection, easy peeling
with CONSTAB CONPEEL® Compounds

 **Polyethylene Packaging, Polypropylene Cast
and Calender Films**
 Rolling to success with Kafrit Group
Masterbatches and Compounds

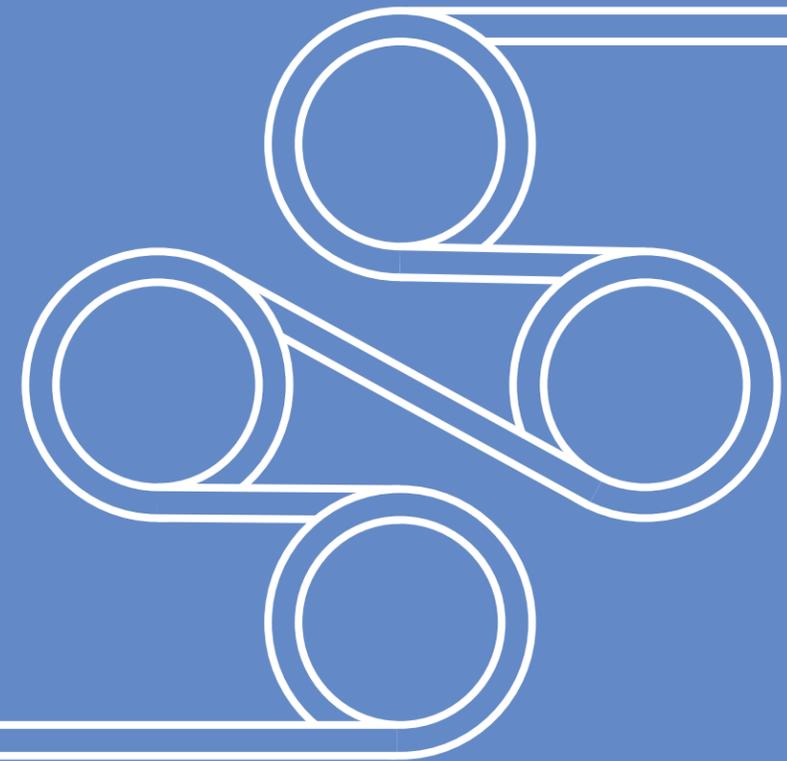
 **Polycarbonate and PMMA Sheets**
for a transparent view with Kafrit Masterbatches
and Compounds

 **Pipes and Sheets**
Customized solutions with Kafrit Group
Masterbatches and Compounds

 **Injection Molding, Blow Molding**
Injecting new ideas into your products with
Kafrit Group Masterbatches and Compounds

 **Nonwovens**
Adding value to Fibers and Nonwovens
with Kafrit Group Masterbatches

 **Agricultural Film**
Growing success with Kafrit Group
Masterbatches and Compounds



Global supply, local partnership:
We are where you are.



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