

Enlightening solutions with Kafrit Group Masterbatches and Compounds

# Flame Retardants







Kafrit Group is a leading producer of Masterbatches and Compounds for the plastics industry and currently employs more than 800 people. In 2024, the Group achieved ~350 million \$ turnover with an available capacity of more than 165,000 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 and Delta Kunststoffe AG in Germany, China's Suzhou Constab Engineering Plastics Co. LTD, Polyfil Inc. and Badger Color Concentrates Inc. in the USA, the Canada-based Kafrit NA Ltd. and ABSA Resin Technologies Inc., Addvanze AB in Sweden and 51% of Plastics- App in Israel.** 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.



# **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.







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 has always been a key area of our expertise. Kafrit Group employs a staff of more than 800 people who work on innovative products an make use of our vast pool of knowledge developed over 50 years in the plastics industry. Our experts optimize and develop additive concentrates, flame retardants, color concentrates, and compounds for various applications.

Kafrit Group enjoys a close partnership with renowned research institutions such as the Shenkar University in Israel and various universities in Germany. Moreover, we maintain a strong cooperation with well-known suppliers including machine manufacturers who recommend our products for use in combination with their machines.

# Our tailor-made solutions – exceeding your expectations.

# **Check Kafrit Group's latest Halogen-Free Flame Retardant Masterbatches:**

- Unique performance in sheets, pipes and foams made of PE, PP, PS.
- Applicable in sheets, pipes and others
- Suitable for translucent to transparent articles
- Excellent UV stability

# New Halogen-Free Flame Retardant Masterbatches open new market opportunities:

- High efficiency
- Low dosing levels
- Good optical properties
- High UV light resistance

### **Further advantages are:**

- Easy processing in many articles made from polyolefins
- Suitable as replacement of existing systems as well as for new market opportunities
- Dedicated grades for various fire standards provide optimum performance

#### 1. Fibers/Nonwovens

Code	Polymer type	Description	Dosing %
FR 0K580 LL	PE/PP	Halogen-free FR masterbatch FMVSS 302, UL94, DIN 4102, EN 13501, transparent. For PE/PP.	3.0 – 4.5
HFFR 00242A PP	PP	Halogen-free FR masterbatch FMVSS 302, UL94, DIN 4102, EN 13501. For PP.	4.0 – 7.0
HFFR 00C82 PP	PP	Halogen-free FR masterbatch FMVSS 302, UL94, DIN 4102, EN 13501. For PP. <b>High efficiency</b> .	2.5 – 5.0
HFFR 00C82A PP	PP	Halogen-free FR masterbatch FMVSS 302, UL94, DIN 4102, EN 13501. For PP. <b>High thermal stability.</b>	4.0 – 7.0
FR 0H120 PP	PP	Brominated FR masterbatch. ATO FREE , FMVSS 302, UL94, DIN 4102, EN 13501.	5.0 – 15.0
FR 00S83 LL	PE/PP	Brominated FR masterbatch. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1n CAPI 84 (Tarpaulin applications).	5.0-25.00

## 2. Pipes

Code	Polymer type	Description	Dosing %
FR 0D200 LL	PP	Brominated FR masterbatch for PP applications. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1, EN 61386-1, available in many different colors.	3.0 - 10.0
FR 00T64 LD	PE/PP	Brominated FR masterbatch. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1.	4.0 – 40.0
FR 00B06 LL	PE/PP	Brominated FR masterbatch, <b>ATO FREE</b> for PE Pipes and films.	5.0 - 20.0
HFFR 00228 PP	PP	Halogen-free FR masterbatch. LPS 1207, UL94, EN 61386-1, low smoke standards, low HRR, <b>available in many different colors.</b>	2.5-7.0
HFFR 00C97 PP	PP	Halogen-free FR masterbatch. UL94, EN 61386-1. For low smoke standards, for standard EN 50642. Max dosing 5.4%, available in many different colors.	2.0 – 5.0
HFFR 00557 LD	PE/PP	Halogen-free FR masterbatch UL94 V0, suitable for injection molding and extrusion (PE/PP).	20.0 – 40.0
FR 00285 PS	PS	Monomeric brominated flame retardant plus synergist masterbatch. DIN 4102 B1, B2, EN 13501 E. Suitable for flame retarding foamed PS (XPS).	2.0 - 5.0
FR 07180 LD	PE/PP	Brominated flame retardant masterbatch. Provides flame retardancy according FMVSS 302, UL94, DIN 4102-1, EN 13501-1.	3.0-20.0
FR 05080 LD	PE/PP	90% Antimony Trioxide MB on LDPE carrier.	2.0-10.0
ZHFR 07175 LD	PE/PP	<b>Zero halogen flame retardant masterbatch.</b> Provides flame retardancy according FMVSS 302, UL94, DIN 4102-1, EN 13501-1.	2.0-12.0
ZHFR 07179 UNI	PE/PP	<b>Zero halogen flame retardant masterbatch.</b> Provides flame retardancy according NF P 92-503 including NF P 92-504, NF P 92-505 for classification M1 to M4.	10.0-18.0

# 3. Films

Code	Polymer type	Description	Dosing %
FR 07180 LD	PE/PP	Brominated flame retardant masterbatch. Provides flame retardancy according FMVSS 302, UL94, DIN 4102-1, EN 13501-1.	3.0-20.0
FR 00S83 LL	PE/PP	Brominated FR masterbatch. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1n CAPI 84 (Tarpaulin applications).	5.0-25.00
FR 05080 LD	PE/PP	90 % Antimony Trioxide MB on LDPE carrier.	2.0-10.0
FR 01120 UNI	PE/PP/ABS/ HIPS/PVC	80% Antimony Trioxide MB on EMA carrier, suitable for PA, PBT PS, ABS, LDPE, LLDPE, PP, HDPE and PVC.	4.0-10.0
ZHFR 07175 LD	PE/PP	<b>Zero halogen flame retardant masterbatch.</b> Provides flame retardancy according FMVSS 302, UL94, DIN 4102-1, EN 13501-1.	2.0-12.0
ZHFR 07179 UNI	PE/PP	<b>Zero halogen flame retardant masterbatch.</b> Provides flame retardancy according NF P 92-503 including NF P 92-504, NF P 92-505 for classification M1 to M4.	10.0-18.0
FR 0B041 LD	PE	Chlorinated FR masterbatch. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1.	4.0-10.0
FR 0B04D LD	PE	Chlorinated FR masterbatch (Lower ATO) . LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1.	4.0-10.0
FR 07177 LD	PE	Chlorinated flame retardant masterbatch, brightened color. Provides flame retardancy according FMVSS 302, UL-94, DIN 4102-1, EN 13501-1.	3.0-20.0
FR 0D200 LL	PP	Brominated FR masterbatch for PP applications. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1, EN 61386-1, available in many different colors.	3.0 - 10.0
FR 00T64 LD	PE/PP	Brominated FR masterbatch. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1.	4.0 – 40.0

# 4. Sheets

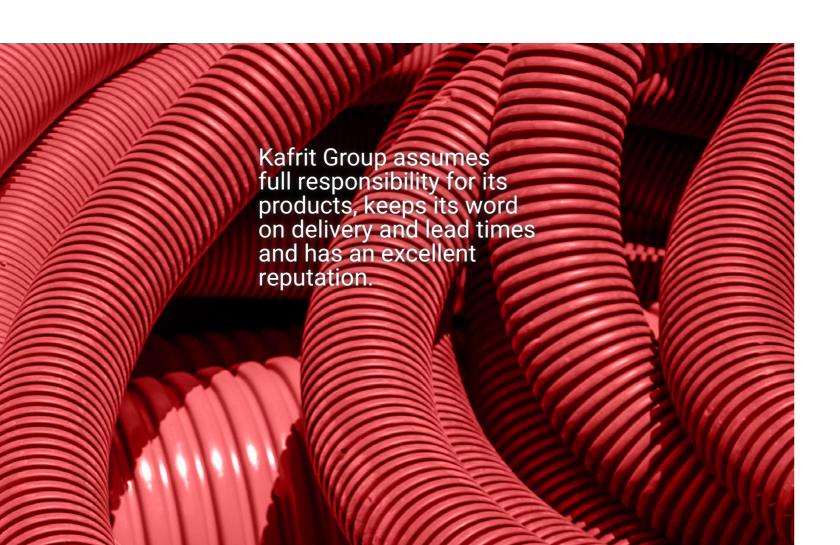
Code	Polymer type	Description	Dosing %
FR 0M09B ABS	ABS/HIPS	Brominated FR masterbatch. UL94 V0.	18.0 – 30.0
FR 09700 PS	ABS/HIPS	Brominated FR masterbatch. UL94 V0, EN 118. <b>High thermal stablity.</b>	18.0 – 22.0
FR 00064 ABS	ABS/HIPS	Brominated FR masterbatch. <b>ATO FREE</b> UL94 VO.	30.0 – 40.0
HFFR 00B26 ABS	ABS/HIPS	ABS HFFR compound for UL 94 V0 (can be made on Hips Matrix).	100
FR 01670 PC	PC	Brominated FR , UL - 94, 1.6mm, V0. Transparent	10.0 – 25.0
FR 00I171 PC	PC	Brominated FR Compound, E - 84, Class A, different thicknesses. Transparent.	100
FR 04530 PC	PC	FR/HFFR MB for PC applications. Translucent. UL 94 V0. Under 4% dosage can be considerd as HFFR.	2.0 – 4.0
HFFR 00987 MMA	PMMA	HFFR PMMA semi compound for UL 94 V2. Transparent.	40.0 – 50.0
FR 00T50 LD	PP	Brominated FR masterbatch for PP applications. LPS 1207.	4.0 – 12.0
FR 07180 LD	PE/PP	Brominated flame retardant masterbatch. Provides flame retardancy according FMVSS 302, UL94, DIN 4102-1, EN 13501-1.	3.0-20.0
FR 00S83 LL	PE/PP	Brominated FR masterbatch. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1л CAPI 84 (Tarpaulin applications).	5.0-25.00
FR 05080 LD	PE/PP	90% Antimony Trioxide MB on LDPE carrier.	2.0-10.0
FR 01120 UNI	PE/PP/ABS/ HIPS/PVC	80% Antimony Trioxide MB on EMA carrier, suitable for PA, PBT PS, ABS, LDPE, LLDPE, PP, HDPE and PVC.	4.0-10.0
ZHFR 07175 LD	PE/PP	<b>Zero halogen flame retardant masterbatch.</b> Provides flame retardancy according FMVSS 302, UL94, DIN 4102-1, EN 13501-1.	2.0-12.0
ZHFR 07179 UNI	PE/PP	<b>Zero halogen flame retardant masterbatch.</b> Provides flame retardancy according NF P 92-503 including NF P 92-504, NF P 92-505 for classification M1 to M4.	10.0-18.0

# 5. Injection Molding

Code	Polymer type	Description	Dosing %
FR 04530 PC	PC	FR/HFFR MB for PC applications. Translucent. UL 94 V0. Under 4 % dosage can be considerd as HFFR.	2.0 - 4.0

#### 6. Foams

Code	Polymer type	Description	Dosing %
FR 0B041 LD	PE	Chlorinated FR masterbatch. LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1.	4.0-10.0
FR 0B04D LD	PE	Chlorinated FR masterbatch (Lower ATO) . LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1.	4.0-10.0
FR 07177 LD	PE	Chlorinated flame retardant masterbatch, brightened color. Provides flame retardancy according FMVSS 302, UL-94, DIN 4102-1, EN 13501-1.	3.0-20.0
FR 00R58A PS	PS	Polymeric brominated FR masterbatch. DIN 4102 B1, B2. Suitable for flame retarding foamed PS (XPS). Based on Polymeric FR, which does not bloom. <b>High efficiency.</b>	2.0-5.0
FR 00R58 PS	PS	Polymeric brominated FR masterbatch. DIN 4102 B1, B2. Suitable for flame retarding foamed PS (XPS). Based on Polymeric FR, which does not bloom. <b>High thermal stability.</b>	2.0-5.0
FR 00284 PS	PS	Monomeric brominated flame retardant plus synergist <b>plus nucleation masterbatch</b> . DIN 4102 B1, B2, EN 13501 E. Suitable for flame retarding foamed PS (XPS).	2.0-5.0
FR 00285 PS	PS	Monomeric brominated flame retardant plus synergist masterbatch. DIN 4102 B1, B2, EN 13501 E. Suitable for flame retarding foamed PS (XPS).	2.0-5.0





#### Please request for further information:



#### **BOPP**

Optimizing BOPP film production with CONSTAB GER® Masterbatches and Compounds



#### OPF

Sustainable solutions for flexible packaging films with CONSTAB GER® 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



#### Flame Retardants

Enlightening solutions with Kafrit Group Masterbatches and 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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