

New approach to reclosable packaging

# Extrudable reclosable adhesive







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?





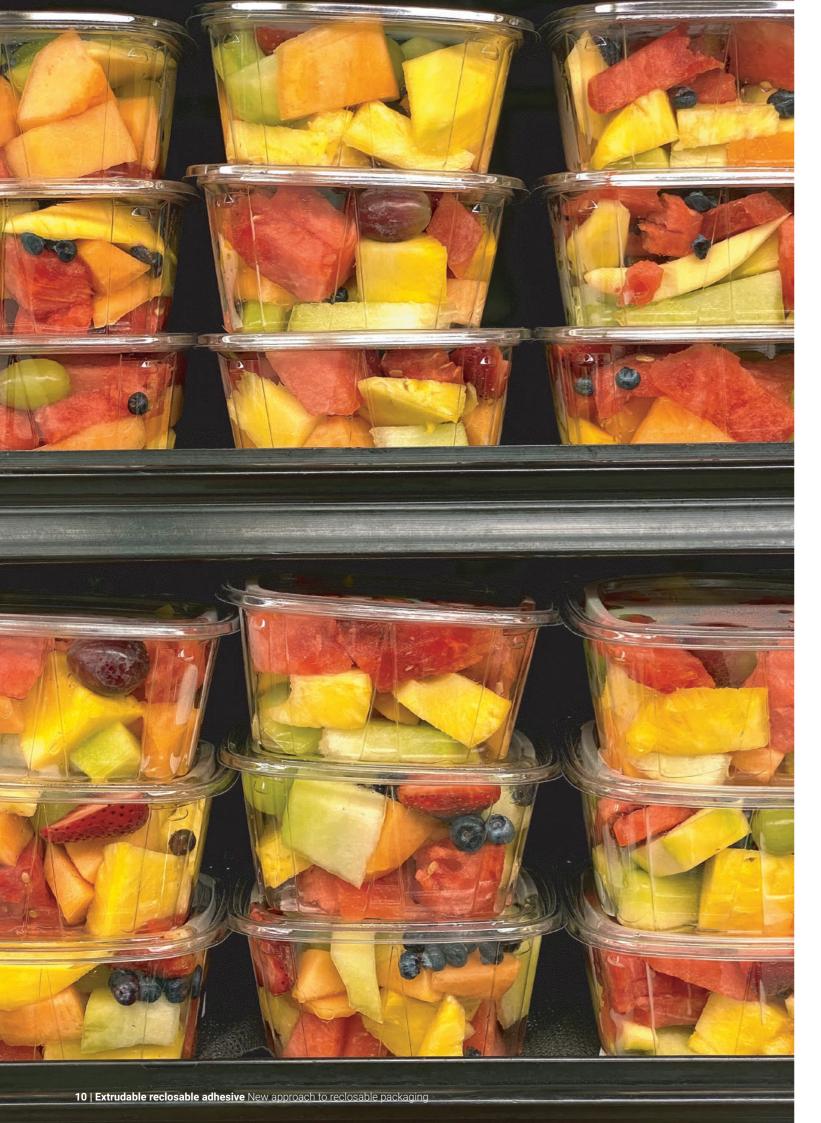
# Defining new production goals

# 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.



# Your benefits at a glance

# **EXCELLENT PERFORMANCE:**

Shows excellent reclosability over tens of opening cycles.

# **HIGHLY EFFICIENT:**

The reclosability is integrated directly into the packaging film, avoiding the need for additional processes.

# **UNIQUE TECHNOLOGY:**

Creating a cohesive failure within the adhesive layer after 1st opening.

# **FULLY RECYCLABLE:**

Polyolefin based Grades, available for All PE & All PP packaging.

# **HIGHLY COMPATIBLE:**

Fits existing blown and cast extrusion lines, making it easy for manufacturers to adopt. Low melt flow allows working at wide range of temperature profile.

# **ADDITIONAL FEATURES:**

Odorless and Transparent material

# Sometimes failure is the key to the solution. In this case, to reclosing.

# Our adhesive technology compared to conventional solutions.

limits the holding forces.

The improved reclosability is due to the use of the extruded adhesive. Unlike conventional systems, this breaks evenly at the first opening, so that it is on both the lid of the package and the tray itself. As a result, during each subsequent opening cycle and subsequent reclosure, adhesive layer adheres to adhesive layer, light pressure is enough to make it stable. In conventional systems, the layer for reclosing meets the packaging material directly, which





# Fitting to standards, of course regulatory compliances

Complies with EU Regulation (EC) No. 1935/2004 article 3(1) & (EU) No.

Complies with FDA Regulation 21 CFR & 175.105, 21 CFR& 177.1520

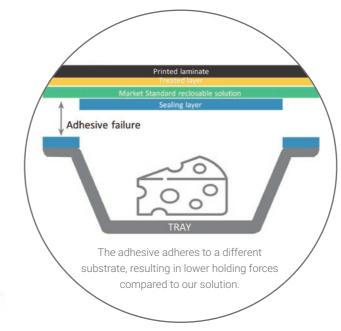
This product is manufactured using non-animal-derived raw materials



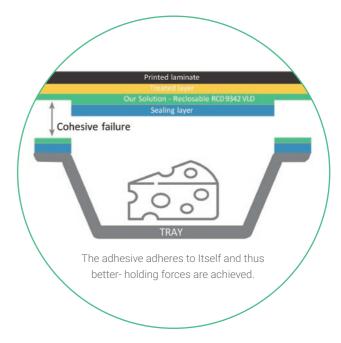
# What makes the difference



# **AFTER OPENING MARKET STANDARD:**



# **AFTER OPENING OUR SOLUTION:**



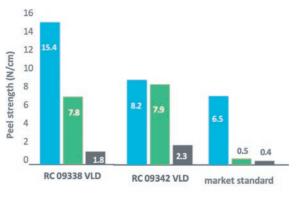
# **Technical details**

Properties	RC 09338 VLD	RC 09342 VLD
Compatibility	PE Trays, PP Trays, PETPE Trays	PE Trays, PP Trays, PETPE Trays, APET Trays
Aspect	Granulates	Granulates
Color	Transparent	Transparent
Odor	Odorless	Odorless
Melt flow index (190°C/2.16kg)	6.5	5.5

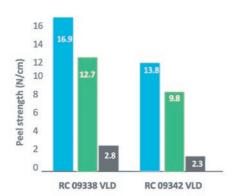
# **TEST CRACKING-/OPENING FORCE**

Testing method:

RC Film - 3-layer structure  $20\,\mu/10\,\mu/20\,\mu$  Sealed to: LDPE/RC film/LDPE Measured via T- peel test at 300 mm/min.



RC Film - 3-layer structure  $20\,\mu/10\,\mu/20\,\mu$ Sealed to: Random PP /RC film/ Random PP Measured via T- peel test at 300 mm/min.

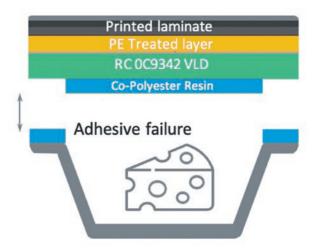


1st Cracking force
 1st opening force
 5th opening

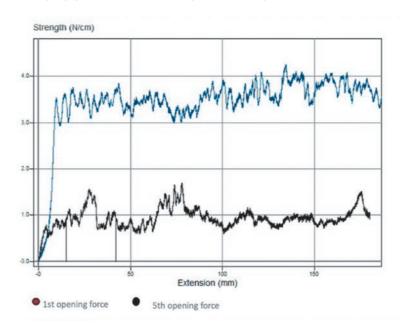
# **New! Solution for APET Trays**

# **COMPATIBLE WITH CO-POLYESTER RESINS**

- Compatible with PE, PP and Copolyester Resins
- PET Tray recycling- no residuals on the tray
- Cost Efficient- save the use for Tie layer



# **RECLOSABLE PE FILM SEALED TO APET**



Testing method:

RC Film - 3-layer structure 30  $\mu/RC09342$  VLD]10  $\mu[/$  [10  $\mu[$  Sealed to: LDPE/RC film/APET

Measured via T- peel test at 300 mm/min.

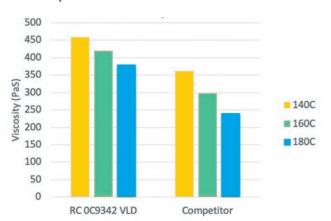
# **Technical details**

# **DESCRIPTION**

- Extrudable adhesive for Cast & Blown Extrusion
- · Polyolefin based- fully recyclable material
- · Cohesive Failure mode from the 1st opening
- · Low-Odor, free-flowing pellets

Properties	Values	Unit	Method
Aspect	Granulates		
Melt flow index	5-7	g/10min	A.S.T.M 1238 (190°C/2.16kg)
Viscosity	380	PaS	Shear rate [40S-1], 180°C

# Effect of temperature on viscosity of RC 09342 VLD vs. competitor's adhesive.



# **Storage Performance**



# Room Temperature (23°C)

Full reclosure retained through all 10 cycles

Minimal tack change observed

# Chilled (4°C)

No degradation in reclosability performance

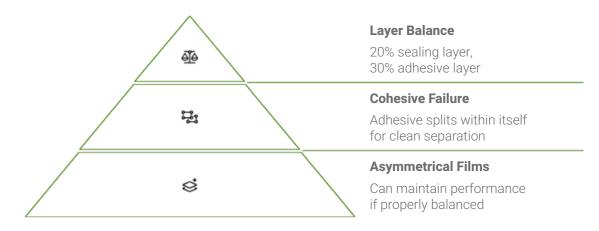
Consistent results across all 10 cycles

# Frozen (-18°C)

No degradation in reclosability performance

Maintained adhesion through all test cycles

# **Film Structure Optimization**



The thickness ratio between sealing and adhesive layers directly affects opening force and reseal performance. If sealing layer thickness is reduced, increase adhesive thickness accordingly to maintain optimal performance.

RC09342 is designed to fail cohesively — splitting within the adhesive and sticking to itself. This ensures clean, even separation and reliable reseal performance across multiple cycles.

# **Processing conditions**

# **Cooled Hooper and chilled Feeding system**

Water cooling of the feed zone is essential to preventexcessive heating of the resin, as it enters the screw

### **PSA** screw and smooth barrel

C93 adhesives work well on pressure sensitive adhesive screw design with the following properties:

- L/D of at least 24:1
- Diameter 60mm-70mm
- At least three heating zones
- Water-cooled feeding zone

	Cast	Blown
Feed Zone	25°C	25°C
Zone 1	180°C	180°C
Zone 2	220°C	200°C
Zone 3	220°C	210°C
Zone 4	220°C	210°C
Zone 5	220°C	210°C
Adapter	220°C	220°C
Die	220°C	220°C

# **Packaging and Storage**

Material should be stored in a cool dry place in the original unopened package at a temperature less than 30°C.

Keep away from steam lines and heated process equipment during storage to prevent blocking.

Keep package closed to minimize contamination.



### Please request for further information:



### BOPP

Optimizing BOPP film production with CONSTAB GER® Masterbatches and Compounds



### ROPE

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

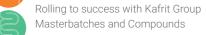


# Flame Retardants

Enlightening solutions with Kafrit Group Masterbatches and Compounds



# Polyethylene Packaging, Polypropylene Cast and Calender Films





# **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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