



UNIQUELY VERSATILE

OUR COMPANY

BENEFITS IN ALL SHAPES AND SIZES

Thermoplastic Elastomers (TPEs) are the materials used to make progress. Compounds from KRAIBURG TPE will open up all sorts of new opportunities in product development and processing making production efficient for you as well.

The solutions provided by KRAIBURG TPE will enable you to meet the highest requirements. Our company not only offers high-quality specially custom-engineered products, but also provides a unique level of comprehensive customer service.

The company's motto, "CUSTOM-ENGINEERED TPE AND MORE", is meant to be taken literally. Our goal is to identify the challenges you face with you and support you at all times anywhere in the world.







THE MARKET

MAKE LIFE EASY FOR YOURSELF

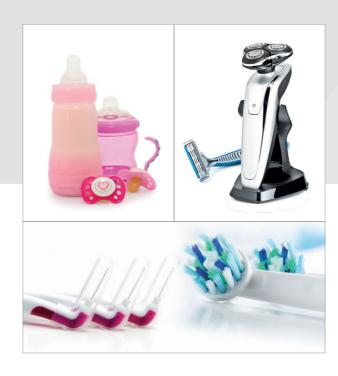
Products made with TPEs pass through many hands and are on the tip of people's tongues everywhere – literally. Toothbrushes and stationery items are just some of the many applications showing how essential thermoplastic elastomers have become. TPEs are not only used for sports articles, toys and personal care products, but are also becoming more popular in packaging.

KRAIBURG TPE has carried out an intensive study of the consumer market and its requirements. You are on the safe side with us: Even during the development stage for our TPEs, we take into account established approvals such as Commission Regulation (EU) No 10/2011, Code of Federal Regulations Title 21 (21CFR) of the U.S. Food and Drug Administration (FDA), as well as the GB 4806.7-2023 standard. Selected compounds also comply with DIN EN 71-3.

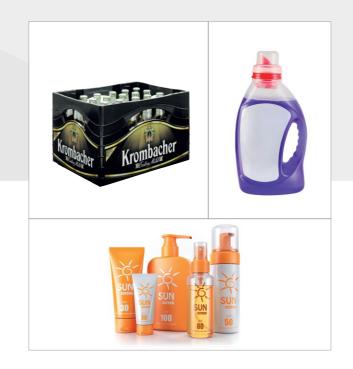
With a low density of up to 0.7 g/cm³, our Lightweight TPE ensures weight-reduced components and end products in various market segments.

APPLICATION AREAS

GETTING THE JOB DONE EVERYWHERE









CONSUMER CARE

- Infant products
- Interdental devices
- Shavers, electrical shavers
- Toothbrushes, electrical toothbrushes

FOOD CONTACT APPLICATIONS

- Coffee capsules
- Cutlery
- Dispenser
- Drinking bottles
- Food container

NON-FOOD PACKAGING

- Crates
- Containers
- Products that need impact modifier
- Tubes

OFFICE SUPPLIES

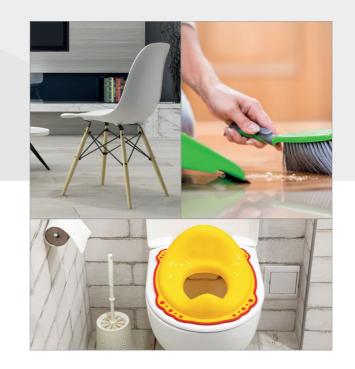
- Accessories
- Erasers
- Pens
- Stamps

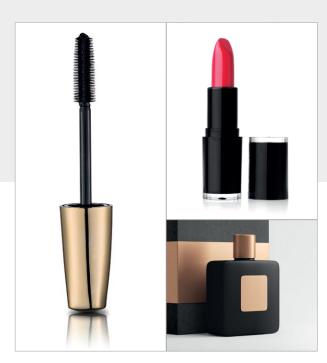
APPLICATION AREAS

GETTING THE JOB DONE EVERYWHERE









TOYS

- Adult toys
- Baby & kid toys
- Electronical toys
- Pet toys

SPORT

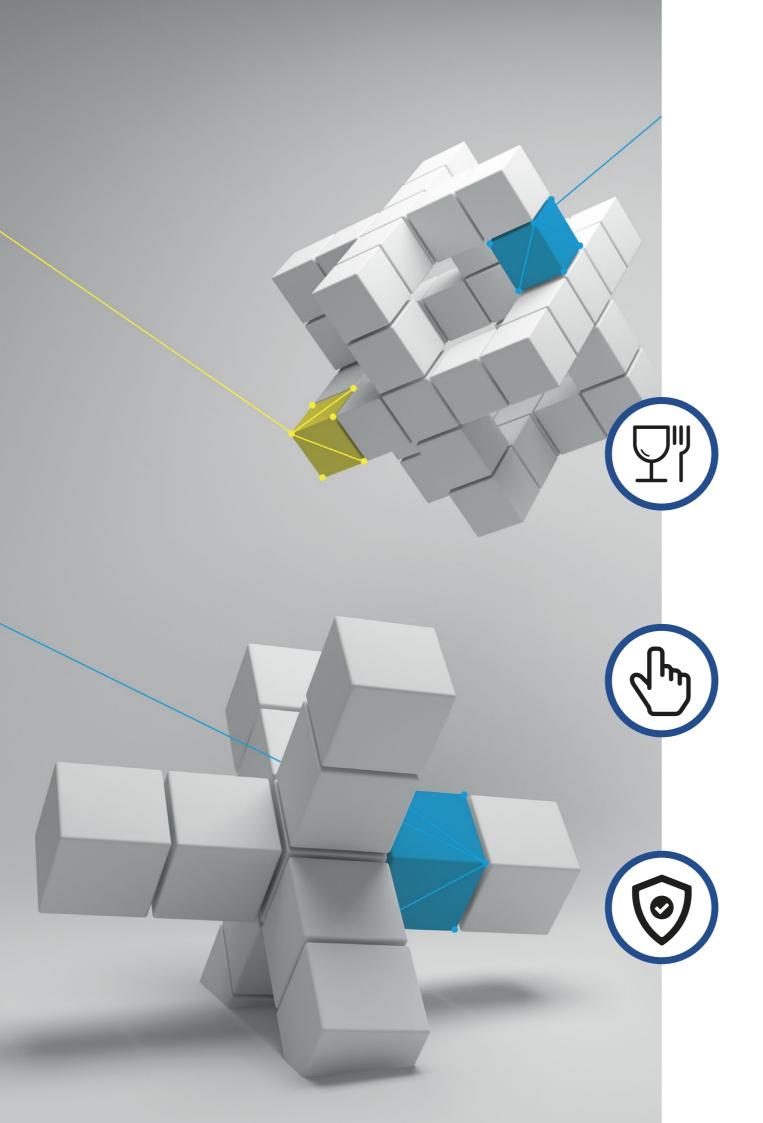
- Ball & racket games
- Cycling, fitness & gym
- Fishing & hunting
- Outdoor & recreation
- Winter sport

HOUSEHOLD ARTICLES

- Brushes
- Cleaning accessories
- Furnitures

COSMETIC APPLICATIONS

- Droppers and dispenser systems
- Lipsticks & lipgloss
- Mascara
- Perfume bottles
- Tubes



MATERIAL PROPERTIES

STAND-ALONE OR IN COMBINATION

CONTACT WITH FOOD

Always to everybody's taste

Materials with food contact are indispensable in the consumer sector. Even during the development of these special TPEs, we have taken into account the established market requirements such as Regulation (EU) No. 10/2011, FDA – Code of Federal Regulations (CFR), Title 21 & GB 4806.7-2023 standard. We will be glad to provide you with comprehensive advice on relevant approvals and conformities even before your project starts.

TACTILE QUALITIES

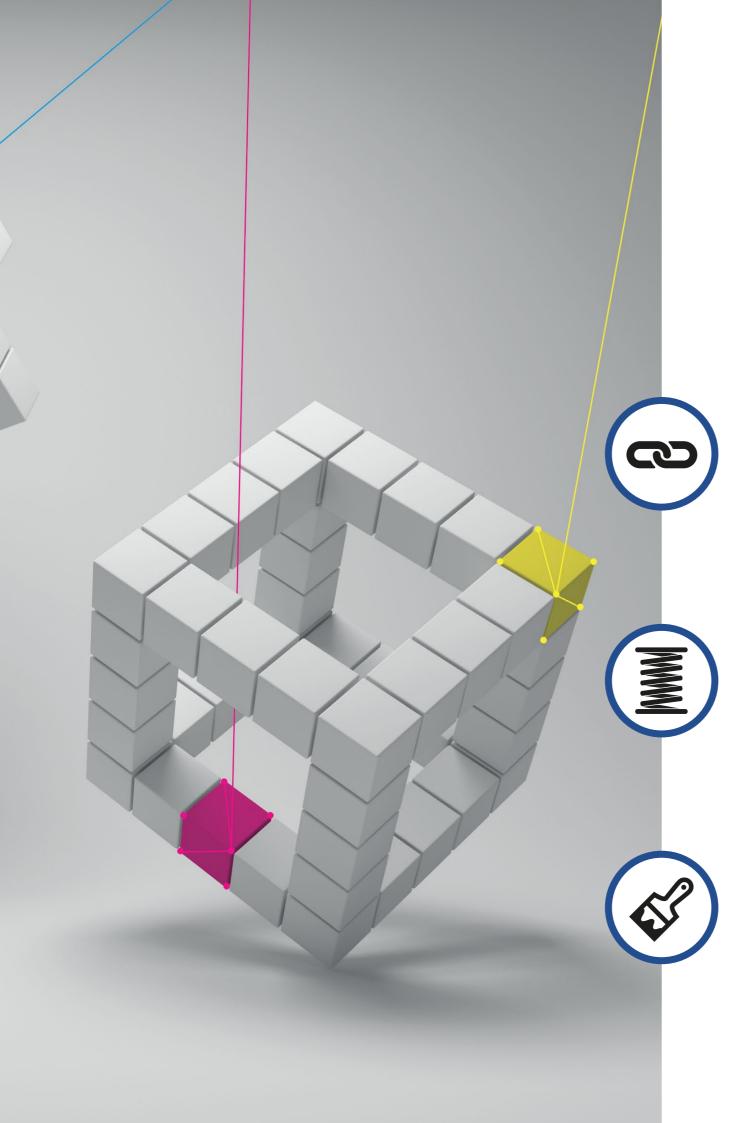
Right Touch

From toothbrushes, household appliances to bottle crates, handles that are pleasant to touch are becoming increasingly important. TPEs make this quality literally tangible, and that is why thermoplastic elastomers turn up in many soft-touch applications, enhancing the value of the end product by various effects.

RESISTANCY

Resists where others fail

Thermoplastic elastomers from KRAIBURG TPE are generally characterized by good resistance to aqueous substances such as acids, bases or salts. Special compounds also provide excellent resistance to detergents, sebum oils and creams.



MATERIAL PROPERTIES

STAND-ALONE OR IN COMBINATION

ADHESION

Always sticking to its promises

Our TPEs have adhesion to a wide variety of plastics. The adhesion of the materials produces reliable, durable and strong results. Our compounds are a safe choice for your multi-component and co-extrusion applications – from personal hygiene articles to toys.

ELASTICITY

Seals things off reliably and keeps them tight

Whether it is for closure valves or container seals – extremely good deformation recovery is a major performance characteristic in TPEs. The specially developed compounds are ideal for a wide variety of applications in the whole field of household articles, office materials, personal care and hygiene products.

COLORING BEHAVIOR

Setting colorful highlights

Visual impression counts. An engaging appearance always means added value. KRAIBURG TPE can match your own individual color to set yourself apart. Our inhouse coloring team provides the right shade of color for TPE compounds with great precision. All of our colors are high-quality and durable, and you can rely on our global supply security.

CUSTOM-ENGINEERED PROPERTIES

WHAT ARE YOUR REQUIREMENTS?

The TPE solutions are as multifaceted as the industry itself. Our compounds are established atop the industry in different sectors. For us, there is no such thing as a niche market.

Tell us about the challenges you may be facing while implementing your product idea and we will be pleased to help you improve your product's quality and functionality.

Have we left anything out that you need? Then feel free to contact us.





SERVICE GOOD ADVICE IS INCLUDED

Your satisfaction is the standard we set for our work. To ensure the highest level of customer satisfaction, we have developed a quality assurance approach that covers the products, processes, and people involved. Our laboratories are designed and equipped to follow the latest state of the art technology.

In other words: you can tell us what challenges you are facing and we will dedicate ourselves to finding the best possible solution.

Custom-engineered and extremely high-quality compounds provide the basis for this.

In addition, you will be able to benefit from our technical expertise, built up over many years of experience. Thanks to personal on-site consulting and unique global customer service, you will be able to enjoy the maximum support.

SUSTAINABILITY

ALWAYS LOOKING TO THE FUTURE

EXCELLENCE BY TRANSPARENCY

We rely on certified processes and established standards

KRAIBURG TPE acts and operates in accordance with recognized standards. **These are:**

- Integrated quality, environment and energy management systems
- Certified GRS standard for products produced in Malaysia
- Product Carbon Footprint of KRAIBURG TPE-Compounds
- Climate targets based on the guidelines of the Sciencs Based Target Initiative (SBTi): Starting from the base year of 2021, the companys scope 1 and scope 2 CO₂e emissions are to be reduced by 46.2 percent by 2031, scope 3 CO₂e by 27.5 percent.
- **ISCC PLUS certification** available for many products in the EMEA sales region
- Carbon Disclosere Project (CDP) rating since 2020
- **EcoVadis:** The platform classifies the sustainability of companies in holistic ratings. Our commitment to sustainability at our locations has been awarded "Gold" and "Silver" in the past.



TPE PORTFOLIO SERIES

CONSUMER SECTOR

THERMOLAST® K	Adhesion Materials	Page
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THERMOLAST® K



The FC series is your material solution for everyday life applications with regulatory requirements. The series is characterized by its PP adhesion. The natural-colored or translucent materials can be colored in many different ways.

Processing Method: Extrusion, Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxCGN	20 – 90 Shore A	Natural	PP
TFxCGT	20 – 90 Shore A	Translucent	

Typical Applications

- Function and design elements
 Grip applications
 Household articles
 Razors
 Toothbrushes
 Toys
- Material Advantages

Packaging

- Adhesion to PP
 Colorable
 In-process recycling possible
 ISCC PLUS ready (mass balance approach)
- Halogen-free (according to IEC 61249-2-21)

Regulations / Approvals

- Compatible for HDPE Recycling certified by Cyclos HTP Regulation (EU) No 10/2011
- Compatible for PP Recycling certified by Cyclos HTP
- US FDA CFR 21 (raw material conformity)

■ EN71-3

THERMOLAST® K



The FC/AD1 series is your material solution for applications of daily life with food contact requirements. It is characterized by its adhesion to polar thermoplastics such as PC, ABS and PETG. The natural-colored materials can be colored in many different ways.

Processing Method: Extrusion, Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxFMA	50 – 90 Shore A	Natural	ABS, PC , PETG
TFxFMS	30 – 40 Shore A	Natural	

Typical Applications

- Function and design elements
- Grip applications
- Household articles
- Packaging (for food and care products)
- Razors
- Seals
- ToothbrushesToys

Material Advantages

- Adhesion to ABS, ASA, PC, PC/ABS, SAN
- Adhesion to PET and PETG
- Colorable
- Halogen-free (according to IEC 61249-2-21)
- In-process recycling possible

- ISCC PLUS ready (mass balance approach)
- Optimized flow properties
- Soft touch surface
- Soft, velvety feel

Regulations / Approvals

- FN71-
- Regulation (EU) No 10/2011

- UL 94 HB
- US FDA CFR 21 (raw material conformity)

THERMOLAST® K



The FC/AD/PA series is your material solution for everyday life applications with regulatory requirements. The series is characterized by its PA adhesion. The translucent materials can be colored in many different ways.

Processing Method: Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxPAO	40 – 90 Shore A	Translucent	РА

Typical Applications

- Cosmetic packaging
- Earphones
- Flexible Connections
- Function and design elements

- Handles and grips for consumer applications
- Household articles
- Toothbrushes

Material Advantages

- Abrasion resistance
- Adhesion to PA6 and PA6.6, up to 50% glass fiber
- Adhesion to PA12
- Colorable

- ISCC PLUS ready (mass balance approach)
- Optimized flow properties

Regulation (EU) No 10/2011

Optimized mechanical properties

Regulations / Approvals

- Compatible for HDPE Recycling certified by Cyclos HTP
- Compatible for PP Recycling certified by Cyclos HTP
- US FDA CFR 21 (raw material conformity)

■ EN71-3

THERMOLAST® K



The FC/AD/PP series is your material solution for everyday life applications that comply with various global food contact regulatory standards. It is available in natural or translucent colors. The series is characterized by its PP adhesion.

Processing Method: Extrusion, Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxOGL-LCNT	30 – 90 Shore A	Translucent	PP
TFxOGN-NTRL	30 – 90 Shore A	Natural	

Typical Applications

- Household articles
- Packaging (for food and care products)
- Razors

- Soft touch
- Toothbrushes
- Toys

Material Advantages

- Adhesion to PP
- Colorable
- Free from animal ingredients

- ISCC PLUS ready (mass balance approach)
- Optimized flow properties

Regulations / Approvals

- GB 4806.7-2023
- Compatible for HDPE Recycling certified by Cyclos HTP
- Compatible for PP Recycling certified by Cyclos HTP
- FN71-3
- Regulation (EU) No 10/2011
- US FDA CFR 21 (raw material conformity)

THERMOLAST® K



The FC/AP series is your material solution for everyday life applications with regulatory requirements for the Asia Pacific market. It is available in natural or translucent colors. The series is characterized by its PP adhesion.

Processing Method: Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxBNA	30 – 90 Shore A	Natural	PP
TFxBTL	30 – 90 Shore A	Translucent	

Typical Applications

- Function and design elements
- Grip applications
- Household articles
- Packaging

- Razors
- Seals for housings
- Toothbrushes
- Toys

Material Advantages

- Adhesion to PP
- Colorable
- Halogen-free (according to IEC 61249-2-21)
- In-process recycling possible

- Non-sticky surface
- Optimized mechanical properties
- Optimized flow properties

Regulations / Approvals

- Regulation (EU) No 10/2011

US FDA CFR 21 (raw material conformity)

THERMOLAST® K



The FC/CM2 series is your material solution for fatty food contact applications. It has an extremely low migration potential. The compounds are available in translucent and can be colored.

Processing Method: Extrusion, Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxCMB-SLS	40 – 90 Shore A 30 – 50 Shore D	Translucent	PP

Typical Applications

- Closures
- Function and design elements
- Household articles
- Membranes

- Packaging for food Seals for housings
- Soft touch
- Valves

Material Advantages

- Adhesion to PP
- Colorable
- In-process recycling possible
- Low migration potential
- Regulations / Approvals
- EN71-3

- Optimized mechanical properties Version with more than 90 % ISCC PLUS certified
- content available (mass balance approach)

• GB 4806.7-2023

Regulation (EU) No 10/2011

US FDA CFR 21 (raw material conformity)

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THERMOLAST® K

Series FC/CS

The FC/CS series is your material solution for everyday life applications with regulatory requirements. The series is characterized by its optimized compression set, its good mechanical properties and its adhesion to PP. The translucent materials can be colored in many different ways.

Processing Method: Extrusion, Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxSTE	30 – 80 Shore A	Translucent	PP
Typical Applications			
Food BumpersClosuresFlexible ConnectionsHousehold articles		MembranesPackaging (for food arSeals for housingsValves	nd care products)
Material Advantages			
Adhesion to PPColorableFree from animal ingredientsHysteresis		In-process recycling possibleISCC PLUS ready (mass balance approach)Optimized compression set at high temperaturesOptimized mechanical properties	
Regulations / Approvals			
• Compatible for HDPE Re	ecycling certified by Cyclos HTP	• Regulation (EU) No 10	/2011

THERMOLAST® K



■ EN71-3

The FC/ht series is your highly transparent material solution for everyday life applications with regulatory requirements. The series is characterized by its PP adhesion. The highly transparent materials can be colored in many different ways.

Processing Method: Extrusion, Injection Molding

Compatible for PP Recycling certified by Cyclos HTP

Compound Name	Hardness	Color	Adhesion
TFxFHT TFxTHT	30 – 80 Shore A 60 – 80 Shore A	Transparent	PP

Typical Applications

Al and the second	
Function and design elements	 Razors
 Grip applications 	 Toothbrushes
 Household articles 	Toys
 Packaging (for food and care products) 	

Material Advantages

- Adhesion to PP
- Colorable, also in effect colors
- Free from animal ingredients
- Halogen-free (according to IEC 61249-2-21)
- High grip surface

- In-process recycling possible
- ISCC PLUS ready (mass balance approach)

US FDA CFR 21 (raw material conformity)

- Low density
- Transparency

Regulations / Approvals

- Compatible for HDPE Recycling certified by Cyclos HTP
- Compatible for PP Recycling certified by Cyclos HTP
- EN71-3

- Regulation (EU) No 10/2011
- US FDA CFR 21 (raw material conformity)

THERMOLAST® K



The FC/HE/tl series is your material solution for everyday life applications with regulatory requirements. The series is characterized by its high elastic properties and its adhesion to PP. The translucent materials can be colored in many different ways.

Processing Method: Extrusion, Injection Molding

Compound Name	Hardness	Color	Adhesion
TFXAAA TFXAAB TFXAAC TFXAAF	80 Shore A 40 - 95 Shore A 50 - 70 Shore A 60 Shore A	Translucent	PP

Typical Applications

- Closures
- Flexible Connections
- Household articles
- Membranes

- Packaging (for food and care products)
- Seals for housings
- Toys
- Valves

Material Advantages

- Adhesion to PP
- Colorable, also in effect colors
- Free from animal ingredients
- High elasticity

- Hysteresis
- In-process recycling possible
- ISCC PLUS ready (mass balance approach)
- Optimized mechanical properties

Regulations / Approvals

- Compatible for HDPE Recycling certified by Cyclos HTP
- Compatible for PP Recycling certified by Cyclos HTP
- EN71-3

- Regulation (EU) No 10/2011
- US FDA CFR 21 (raw material conformity)

THERMOLAST® K



The FC/LF series is your material solution for everyday applications with regulatory requirements. The series characterized by its optimized compression set. The compounds have a high quality and smooth surface and a low friction coefficient, are translucent and can be colored in many different ways.

Processing Method: Extrusion, Injection Molding

Compound Name	Hardness	Color	Adhesion
TFx0QD-LCNT	30 – 90 Shore A	Translucent	PP

Typical Applications

- Cosmetic packaging
- Function and design elements
- Grip applications
- Handles and grips for consumer applications
- Household articles
- Packaging for food
- Packaging for care products
- Soft touch surface (thumb wheels, push buttons, switches)

Material Advantages

- Abrasion resistance
- Adhesion to PP
- Colorable, also in effect colors
- In-process recycling possible
- ISCC PLUS ready (mass balance approach)
- Low surface friction
- Optimized compression set
- Optimized demolding
- Smooth touch
- Soft, velvety feel

Regulations / Approvals

- GB 4806.7-2023
- Compatible for HDPE Recycling certified by Cyclos HTP
- Compatible for PP Recycling certified by Cyclos HTP
- MERCOSUR (GMC Res. No. 03/92, 02/12, 39/19)
- Regulation (EU) No 10/2011
- US FDA CFR 21

■ EN71-3 25

THERMOLAST® R



The RC/FC/PCR/AP series is your material solution with a post-consumer recycled content of 9 - 38 % (hardness-dependent) for a variety of applications with adhesion to PP or for single component parts in Asia Pacific. The compounds are available in natural colors and precoloration is possible.

Processing Method: Injection Molding

Compound Name	Hardness	Color	Adhesion
RFxOGM-LCNT	30 – 90 Shore A	Translucent	PP
RFxOGM-NTRL	30 – 90 Shore A	Natural	

Typical Applications

٠	Function	n and	design	elements

- Grip applications • Handles and grips for consumer applications
- Household articles

Razors

- Seals for housings
- Toothbrushes
- Toys

Material Advantages

- Adhesion to PP
- Alternative material to EPDM and PVC-P
- Colorable
- Non-sticky surface
- Optimized mechanical properties
- Precoloration in all colors

- Recycled raw material content
- Soft, non-sticky haptic
- Sustainable material
- Temperature stability up to 80 °C
- Thermoplastic alternative to elastomers

Regulations / Approvals

GRS certified compound

US FDA CFR 21 (raw material conformity)

THERMOLAST® R



The RC/PCR2 series is your material solution with a post-consumer recycled content of > 70% for a variety of applications with adhesion to PP or single component parts. The compounds are available in natural colors and can be colored in many different ways.

Processing Method: Injection Molding

Compound Name	Hardness	Color	Adhesion
RCxOGD-NTRL 3	30 – 90 Shore A	Natural	PP

Typical Applications

- Fasteners
- Function and design elements
- Protection caps
- Razors

- Soft touch
- Sports and leisure applications
- Toys

Adhesion to PP

Material Advantages

- Colorable
- In-process recycling possible
- Recyclable in post-consumer waste stream
- Recycled raw material content
- Recycling-specific raw material influences are possible
- Reduced PCF compared to virgin compound
- Sustainable material

THERMOLAST® S



The FC/S series is your supersoft material solution for everyday life applications with regulatory requirements and outstanding dry and pleasant surface haptics. The compounds are available in translucent and can be colored in many different ways.

Processing Method: Injection Molding

Compound Name	Hardness	Color	Adhesion
TFxZGO-LCNT	30 – 50 Shore 00 50 – 70 VLRH	Translucent	

Typical Applications

- Baits
- Food Bumpers
- Cushioning
- Fun articles
- Function and design elements

- Grommets
- Protectors
- Seals
- Toys

Material Advantages

- Colorable, also in effect colors
- Dry haptics
- Elasticity
- Free from animal ingredients No silicones added

- Optimized mechanical properties at low hardnesses
- Precoloration in all colors
- Resilience
- Soft, velvetv feel
- Suitable for processing in granule-based 3D printing

Regulations / Approvals

- EN71-3
- ISO 10993-10 (Skin irritation)

- Regulation (EU) No 10/2011
- US FDA CFR 21 (raw material conformity)

COPEC®



The VS/FC/CR series is your material solution for packaging applications. The material is resistant to common substances in cosmetic products, especially is dodecane. The compounds are available in natural colors and can be colored in many different ways.

Processing Method: Injection Molding

Compound Name	Hardness	Color	Adhesion
CFxDJG-NTRL	65 – 85 Shore A 40 – 45 Shore D	Natural	COPEC®, PETG and TPC

Typical Applications

- Cosmetic applicators Cosmetic brushes
- Cosmetic packaging

- Cosmetic wipers Droppers
- Soft touch

Material Advantages

- Abrasion resistance
- Adhesion to COPEC®, PETG and TPC
- Demolding
- Free from animal ingredients
- In-process recycling possible

- Optimized flow properties
- Optimized mechanical properties
- Resistance to isododecane, sebum, skin oils, sunscreen or olive oil
- Soft, velvety feel

Regulations / Approvals

- EN71-3
- ISO 10993-23 (Skin irritation)
- MERCOSUR (GMC Res. No. 03/92, 02/12, 39/19)
- Regulation (EU) No 10/2011
- RoHS compliant
- US FDA CFR 21 (raw material conformity)

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