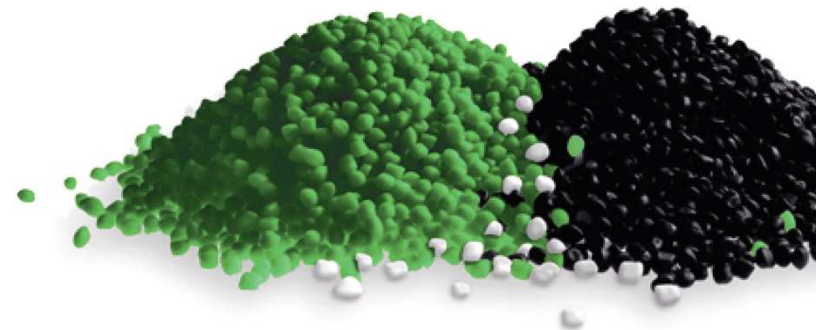


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The Brand Consumers Trust

GENERAL INTRODUCTION INTO MATERIALS
AND APPLICATIONS FOR THE CONSUMER
AND INDUSTRIAL MARKET



TPE Division Markets & Brands



Technologies



Monprene

Styrenics (SEBS)

Blends of styrenic block copolymer rubber and thermoplastic resins

- Soft gel to 50 Shore D
- Clear to opaque
- Silken to tactile feel
- Food Contact compliant grades*
- Bondable to olefins

Vulcanizates* (TPV)

Partially cross-linked for improved performance

- rubber-like appearance
- Heat resistant
- Low compression set
- High tear strength
- Chemical resistant

Olefinic

Olefinic blends, including PP, PE, and OBC/Plastomes

- Balances cost and performance
- Harder materials

Bonding grades*

Proprietary blends for over molding onto engineering resins

- PC
- ABS
- PC/ABS alloys
- PS
- Nylon
- COPE
- HIPS

Markets - examples

Consumer and Industrial

Consumer

Personal Protective Equipment

Sports and Recreation

Regulated Products (Food contact)

Consumer electronics

Overmoulding Grades

Personal Care

Consumer Products



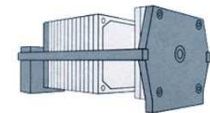
Industrial

Caster wheels

Weather Strips

Pipe Seals

Food Contact i.e. conveyor belts/ filter plates



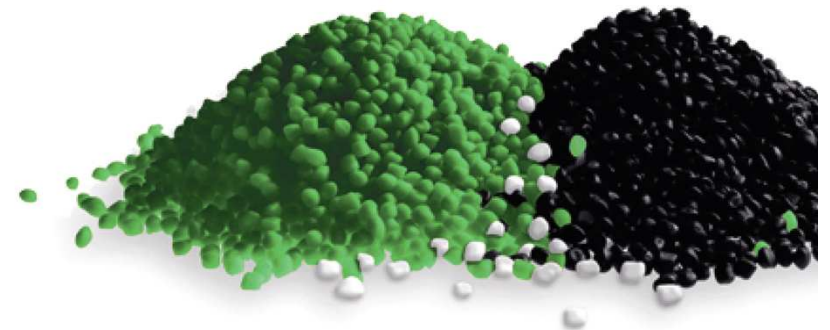
Monprene® | Applications and Attributes

Segment	Applications	Attributes
Personal Care	Razor and toothbrush grips, cosmetic packaging	Bite resistant, skin oil and chemical resistant, easily colorable, FDA compliant
Consumer Products	Furniture, pet accessories, footwear	Ultra soft gels, PVC & phthalate free, tear resistant
Regulated Products	Food containers, caps & closures, beverage tubing	FDA and EN10/2011 compliant, ADM-Free, Excellent barrier properties, dishwasher safe
Sports & Recreation	Pool products, scuba, grips	Chlorine, UV, & ozone resistant, bonding to polyolefins
Consumer Electronics	Cables, headsets and headphones, ear buds, accessories	Stain resistant, PVC/Phthalate free, FR grades available, skin oil resistant, excellent colorability, UV resistant, drapability to match PVC
Industrial Products	Seals & gaskets, castor wheels, pipe seals, Weatherstripping	UV and Ozone resistant, no oil staining, good compression set, EN681-2 & BRL 2020 compliant
Overmolding Grades	Grips, handles, buttons	Bonds to PC, ABS, PA, ASA, SAN, EPDM, TPV, HIPS, PBT, COPE

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Monprene RG-series for Regulated applications such as food contact products



TA **TEKNORAPEX**

Markets - Food Contact

Regulated Products (Food Contact)

Kitchenware

- Food Savers
- Antislip layers
- Grips
- Ice cube trays



Industrial

- Conveyor Belt
- Chicken de-feathering
- Valves
- Filter membranes

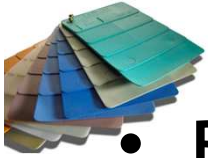


Packaging

- Corks
- Cap Liners
- Valves



Monprene® Standard RG Grades -Food contact



- **RG-101XX**
 - Translucent
 - Medium flow
 - Low density
- **RG-201XX**
 - Extrusion grades
- **RG-182XX**
 - Translucent
 - High flow
 - Low density
- **RG-172XX**
 - Semi- filled
 - High flow

- 40 to 80 Shore A
- RG series can comply with EU 10/2011 and FDA*
- Cost competitive
- Sample plaques available
- Excellent aesthetics
- Wide process window
- Documentation ready
MSDS, TDS, R.o.H.S, SVHC/REACH
- Fast regulatory DoC response
- In stock for fast sampling

** Pre Sample Questionnaire (PSQ) required for all food contact applications, and subject to review by TA regulatory department.*

Brochure available



The Brand Consumers Trust

Thermoplastic Elastomers for Regulated Markets

For decades, the Monprene® TPE product line has been the premier material choice for consumer product designers, OEMs, and processors. Today the latest enhancement to the Monprene portfolio is the RG series of standard products, specifically designed for food contact applications, and other regulated markets such as children's and infants products. These grades are available from 40 to 80 Shore A and are suitable for molding and extrusion.

Regulatory Compliance

Every ingredient used to manufacture the Monprene RG series of standard products is "Generally Recognized as Safe" (GRAS) according to the Federal Food, Drug, and Cosmetic Act, subject to an effective Food Contact Notification (FCN), Threshold of Regulation (TOR), or is identified in at least one section of Title 21 of the Code of Federal Regulations published by the U.S. Food and Drug Administration (FDA).

Food Type	Single Use*	Repeat Use*
Dry Food	✓	✓
Acidic	✓	✓
Aqueous	✓	✓
Alcoholic	✓	✓

*As defined by US and European Regulations

In addition, these grades comply with European Directives for Food Contact, EU 1935/2004 and P/M10/2011, as well as the Toy Safety Directives: 2009/48/EC and EN-71-3. Compliance with these various regulations accelerates our customers' speed to market with new products.



For food contact applications and housewares, the Monprene RG series offers excellent barrier properties, adhesion to polycrystalline and is dishwasher safe. Applications include: food saver seals, utensil grips, and gaskets, knobs and anti-skid parts for kitchen appliances.

Unsurpassed Regulatory Support

Teknor Apex employs a staff of product safety experts dedicated to global regulatory affairs. This team utilizes an integrated system to ensure the integrity of every raw material and finished good, in all of our manufacturing plants in North America, Europe, and Asia. Our expertise in this area is integral to the success of Monprene TPEs used in regulated markets.

- PVC and Phthalate free
- Latex free
- BPA free
- RoHS Compliant
- REACH SVHC Compliant



Brochure available



The Brand Consumers Trust

Comprehensive Portfolio of TPEs

- Styrenic Compounds (TPE-S)
- Thermoplastic Vulcanizates (TPE-V)
- Olefinic Compounds (TPE-O, OBC)
- Specialty Alloys

Customized Solutions

Monprene standard grades are developed to address today's consumer market requirements, however, customized solutions can be built based on your specific needs.



The Monprene RG Series offers excellent bite and tear resistance for children and infants products such as toys, teething rings, and non-spill lids.

Application Development Support

In addition to compounding experts, our technical support includes a team of application development engineers committed to aid our customers in process development and product launches, by helping processors run our products more efficiently and cost effectively.

Monprene RG Series: Typical Properties

Property	Test Method and Condition	Units	RG-10140	RG-10150	RG-10160	RG-10170	RG-10180
Hardness	ISO 868 5 sec del	Shore A	40	50	60	70	80
Specific Gravity	ISO 1183	—	0.89	0.89	0.89	0.89	0.89
Tensile Strength	ISO 37 (flow direction)	Psi (MPa)	218 (1.5)	290 (2.0)	464 (3.2)	653 (4.5)	943 (6.5)
Elongation at Break	ISO 37 (flow direction)	%	110	130	160	190	250
100% Modulus	ISO 37 (flow direction)	Psi (MPa)	218 (1.5)	290 (2.0)	435 (3.0)	653 (4.5)	798 (5.5)
Compression Set	ISO 815 Type A 22 hrs at 70°C	%	23	25	29	33	37
Tear Strength	ISO 34-8 (flow direction)	kN/m	12	18	25	35	45
Viscosity	ASTM D3835 206 1/s, 200°C	Pa.s	215	225	230	245	260

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Monprene® - Examples



Application - Food savers

- Trusted by biggest names in the Industry
 - Supplying Curver for over 4 years
- Cost saving compared to Silicon rubber
- Cost competitive Grades with highest quality
- Customisable Grades
- Proven track record
- 2k Moulding possible
- Bonding grades to Polar substrates



Monprene® | food saver sealing grades **monprene**®

RG 17260 - Red Colour & Modified

- High flow
- Excellent process ability
- Excellent low temperature performance
- Coloured
- Tailored silky feel



RG 17280 - White Colour

- Improved high temperature performance
- 80 Shore A
- Good low temperature performance

Monprene® | Ice cube Tray



RG -17260

- Low temperature Performance
- 60 Shore A (tunable to your requirements)
- Colourable
- No cracking like PP
- Reason to switch
- Considerable cost saving vs Silicon rubber
- Ease of Processing



Monprene®

Wine corks

monprene®

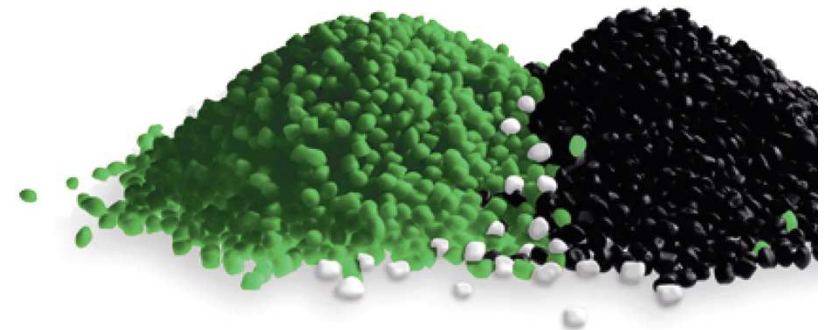
- Physical properties (friction, cork screw handling)
- Organoleptic properties (smell, taste)
- Ageing properties (oxygen transmission)



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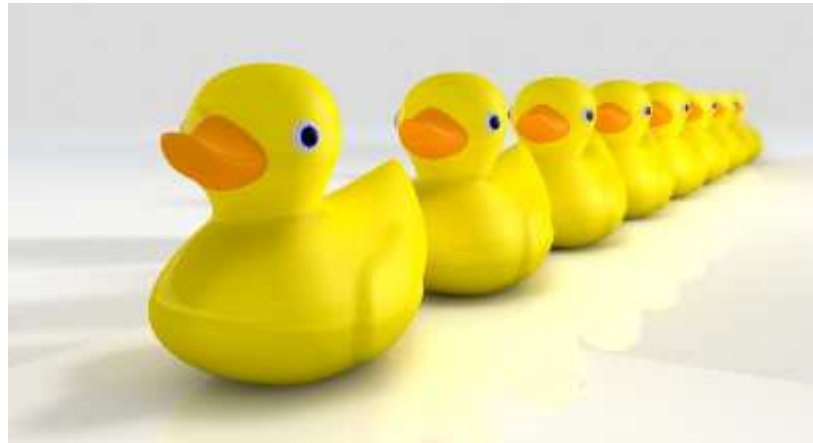
Monprene RG-series for Regulated applications such as toys



EN 71 and TeknorApex RG TPE's

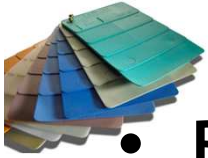
EN 71 - Toy Safety Standard (Including July 2013 updates)

- EN 71-3: Specification for migration of certain elements ✓
- EN 71-9 to 11: Organic chemical compounds - Requirement ✓
- EN 71-12: N-nitrosamines and N-nitrosatable substances ✓



Monprene®

Standard RG Grades -Toys



- **RG-101XX**
 - Translucent
 - Medium flow
 - Low density
- **RG-201XX**
 - Extrusion grades
- **RG-182XX**
 - Translucent
 - High flow
 - Low density
- **RG-172XX**
 - Semi- filled
 - High flow

- 40 to 80 Shore A
- RG series can comply with EU 10/2011 and FDA*
- Cost competitive
- Sample plaques available
- Excellent aesthetics
- Wide process window
- Documentation ready
MSDS, TDS, R.o.H.S, SVHC/REACH
- Fast regulatory DoC response
- In stock for fast sampling

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Monprene[®] Standard Grades

Some general Statements - Toys

- EN 71-3 compliant including changes in July 2013 to include more and lower limits for heavy metals
- Raw materials on positive list ISO 10/2011 (Food contact)*
- FDA - Listed in or compliant to CFR 21*
- SVHC/REACH compliant
- R.o.H.S. compliant
- Bisphenol A free
- Phthalate free
- Brominated and Halogen free raw materials and production

** Pre Sample Questionnaire (PSQ) required for all food contact applications, and subject to review by TA regulatory department.*

Toy wheel properties RG-121HH-series

- For solid toy wheels, typical hardness encountered is 60A and 40A
- Grades developed: Monprene RG-12140 and RG-12160
- Both filled and unfilled available
- Like with all SEBS, pre-colored available as well
- Grades passed field tests in very demanding application and highly automated production process; consistent high quality



type	viscosity Vermont @206s-1	MFI	compression set 70deg 22h	Shore A	density	modulus 100%	modulus 300%	Elongation at break	Shrinkage flow % crossflow %	
RG-12160	174	4	45	62	0.89	1.8	2.6	910	1.2	1.2
RG-12140	200		41	38.3	1.18	0.86	1.15	850		

Toywheel grade for non-solid wheels: RG-18280 or tweaked MP-2948-85 XRD3



Monprene® MP-2948-85 XRD3

Teknor Apex Company - Thermoplastic Elastomer

Thursday, June 11, 2016

General Information

General			
Generic Name	• Thermoplastic Elastomer (TPE)		
Material Status	• Experimental: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Closures • Consumer Applications • Gaskets • Handles	• Kitchenware • Medical/Healthcare Applications • Packaging • Safety Equipment	• Sporting Goods • Toothbrush Handles • Tubing • Writing Instruments
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.07	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	18	g/10 min	ASTM D1238
Elastomers			
	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	4.10	MPa	ASTM D412
Tensile Stress (300% Strain)	5.00	MPa	ASTM D412
Tensile Strength (Break)	10.5	MPa	ASTM D412
Tensile Elongation (Break)	750	%	ASTM D412
Hardness			
	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	85		ASTM D2240
Fill Analysis			
	Nominal Value	Unit	Test Method
Apparent Viscosity (200°C, 206 sec ⁻¹)	142	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	182 to 232	°C
Middle Temperature	188 to 238	°C
Front Temperature	193 to 243	°C
Nozzle Temperature	199 to 249	°C
Processing (Melt) Temp	199 to 249	°C
Mold Temperature	35.0 to 48.9	°C
Injection Pressure	1.38 to 5.52	MPa
Injection Rate	Fast	
Back Pressure	0.172 to 0.689	MPa
Screw Speed	50 to 100	rpm
Cushion	3.61 to 25.4	mm

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

Case study - Tyres for Toys

Material:- RG 182XX Series

Material Properties

- Non marking
- High tensile strength
- Excellent mouldability
- Excellent finish and aesthetics
- Customisable
- Filled/Unfilled
- Colorable
- Gloss
- Excellent bonding to PP for 2K moulding
- Competitive pricing



Brochure available



The Brand Consumers Trust

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- PVC and Phthalate free
- Latex free
- BPA free
- RoHS Compliant
- REACH SVHC Compliant



Brochure available



The Brand Consumers Trust

Comprehensive Portfolio of TPEs

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- Thermoplastic Vulcanizates (TPE-V)
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Specific Gravity	ISO 1183	—	0.89	0.89	0.89	0.89	0.89
Tensile Strength	ISO 37 (flow direction)	Psi (MPa)	218 (1.5)	290 (2.0)	464 (3.2)	653 (4.5)	943 (6.5)
Elongation at Break	ISO 37 (flow direction)	%	110	130	160	190	250
100% Modulus	ISO 37 (flow direction)	Psi (MPa)	218 (1.5)	290 (2.0)	435 (3.0)	653 (4.5)	798 (5.5)
Compression Set	ISO 815 Type A 22 hrs at 70°C	%	23	25	29	33	37
Tear Strength	ISO 34-8 (flow direction)	kN/m	12	18	25	35	45
Viscosity	ASTM D3835 206 1/s, 200°C	Pa.s	215	225	230	245	260

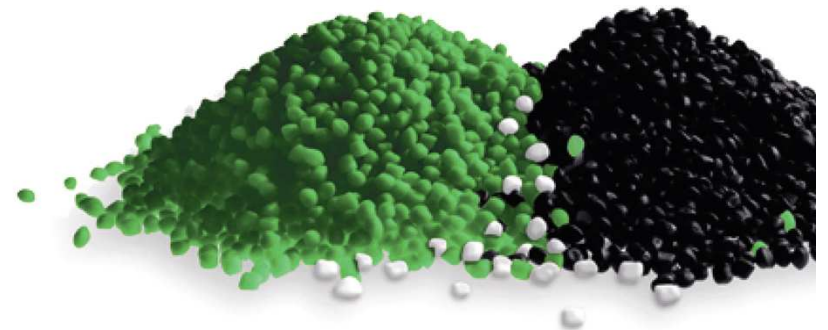
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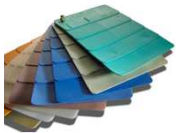
Monprene series for Non-Regulated applications such as tools, sports, personal care



 **TEKNORAPEX**

Monprene[®] Standard Grades - CP

- **CP-101XX**
 - Translucent
 - Medium flow
 - Low density
- **CP-111XX**
 - Opaque
 - Medium flow
- **CP-182XX**
 - Translucent
 - High flow
 - UV Package
- **CP-172XX**
 - Semi- filled
 - High flow
 - UV Package



- 40 to 80 Shore A
- RG series are FDA and EU 10/2011 compliant*
- Cost competitive
- Sample plaques available
- Excellent aesthetics
- Wide process window
- Documentation ready
MSDS, TDS, R.o.H.S, SVHC/REACH
- Fast regulatory DoC response
- In stock for fast sampling

Brochure available

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The Brand Consumers Trust

Thermoplastic Elastomers for Consumer Products

Monprene® TPEs add value to consumer products by improving product performance, aesthetics and tactile appeal. Overmolding Monprene onto a rigid plastic handle provides a soft grip that won't slip, even when wet. Monprene grips enhance the ergonomics of common household appliances and handheld devices as does anti-skid and anti-vibration parts made from Monprene TPEs.

Monprene CP-10100 Series and CP-11100 Series

- Standard grades developed specifically for consumer products
- Wide hardness range: 40 to 90 Shore A
- Available in low and high density
- Light, natural color for superior colorability
- Suitable for skin contact
- Resistant to household chemicals and cosmetics
- High flow for injection molding
- Excellent adhesion to polyolefins
- Recommended for injection molding, insert, and 2K molding



Versatility meets functionality with Monprene TPEs:

Soft enough to provide a comfort grip on a toothbrush yet tough enough to withstand hours of chewing when molded into a dog toy. Monprene can be customized to suit the application which allows OEMs and processors more design flexibility.

- Personal Care: grips for toothbrushes and razors
- Writing Instruments: grips and erasers
- Sporting goods: swim fins, grips, cushioning
- Hand-held Appliances and Tools: grips, buttons, anti-skid pads
- Pet Care: dog toys, groomer grips and accessories
- Toys

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TA TEKNORAPEX

Brochure available



The Brand Consumers Trust

Monprene CP-10100 Series for Consumer Products - Low Density

Property	Test Method and Condition	Units	CP-10140	CP-10150	CP-10160	CP-10170	CP-10180	CP-10190
Hardness	ISO 868 5 sec del	Shore A	40	50	60	70	80	90
Specific Gravity	ISO 1183	----	0.89	0.89	0.89	0.89	0.89	0.89
Tensile Stress (Break)	ISO 37 across flow	psi (MPa)	960 (6.6)	1060 (7.3)	(1510) 10.4	(1800) 12.4	2030 (14)	2470 (17)
Tensile Elongation (Break)	ISO 37 across flow	%	920	870	880	885	840	810
Tensile Stress (100 % Strain)	ISO 37 across flow	psi (MPa)	130 (0.9)	170 (1.2)	240 (1.7)	320 (2.2)	470 (3.3)	710 (4.9)
Compression Set	ISO 815 Type A 22 hrs at 70°C	%	28	30	35	37	44	47
Tear Strength	ISO 34-B flow direction	kN/m	22	27	32	39	50	62
Viscosity	ASTM D3835 206 \dot{V} s, 200°C	Pa.s	209	222	233	240	260	268

Monprene CP-11100 Series for Consumer Products - High Density

Property	Test Method and Condition	Units	CP-10140	CP-10150	CP-10160	CP-10170	CP-10180	CP-10190
Hardness	ISO 868 5 sec del	Shore A	40	50	60	70	80	90
Specific Gravity	ISO 1183	----	1.14	1.15	1.15	1.15	1.15	1.16
Tensile Stress (Break)	ISO 37 across flow	psi (MPa)	95 (0.7)	145 (1.0)	210 (1.4)	290 (2.0)	450 (3.1)	750 (5.2)
Tensile Elongation (Break)	ISO 37 across flow	%	950	900	885	835	790	725
Tensile Stress (100 % Strain)	ISO 37 across flow	psi (MPa)	900 (6.8)	1250 (8.6)	1480 (10.4)	1580 (10.9)	1710 (11.8)	1945 (13.4)
Compression Set	ISO 815 Type A 22 hrs at 70°C	%	26	28	33	38	40	57
Tear Strength	ISO 34-B flow direction	kN/m	18	22	27	31	39	47
Viscosity	ASTM D3835 206 \dot{V} s, 200°C	Pa.s	200	207	196	194	218	248

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Example - Bike grips

Material:- CP 17240

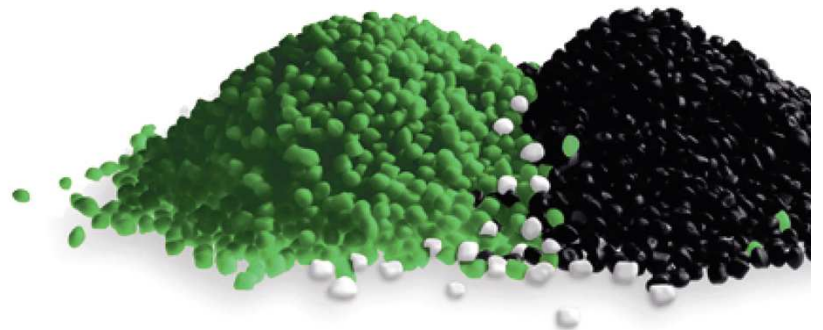
- High abrasion resistance
- Customisable feel
 - Grippy
 - Silken
- Bondable to PP
- Competitive pricing
- Colourable



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Personal Care



 **TEKNORAPEX**

TA's Markets and Products



Toothbrush Grips
Cleaning aids



Razor Handles
Lube strips



Packaging
Valves



Garden Hose

Razor Handles - Case study

Value Proposition

- Bondable to different sub-straights
- Excellent Part definition
- Customizable gloss levels
- Excellent visual properties
- Excellent gate quality
- Suitable for high cavitation tooling



Razor Handles					
Grade	Flow	Substrate	Hardness	Finish	Moulding comments
TL-2588V	High flow	PP & PS	55 Sh. A		Good balance on high cavitation
TL-2588L	Medium flow	PP	45 Sh. A	Low gloss	Good moulding properties on thick part good detail definition
TL-2882D	Medium flow	PP & PS & CoPE	45 Sh. A	Higher gloss	Good gate quality good detail definition
TL-2701	Medium flow	PP	28 Sh. A		Good gate quality

Case study - Clear Grades

Applications:

- Toothbrush Handles
- Mouthpieces
- Cosmetics

Product:

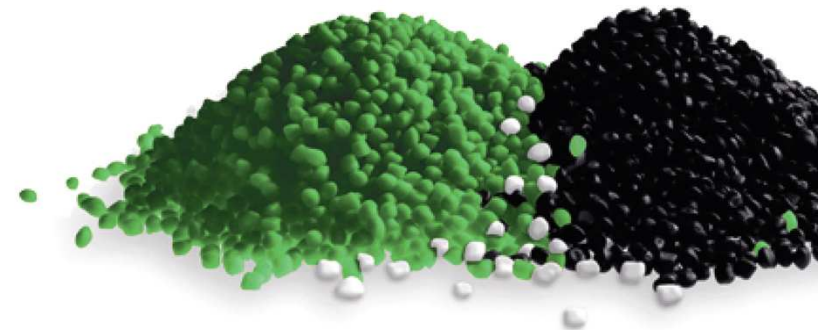
- Monprene RG-18140 CLR
- Various Hardnesses
- Bonds to PP
- Varying levels of clarity vs Cost



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Monprene IN-series for Industrial applications such as window profiles and caster wheels



TA **TEKNORAPEX**

Monprene®

Industrial

Application: Window Profiles

Grades: **Monprene IN 23000-series**

- Any colour
- UV Stabilised
- Excellent Surface Quality
- Excellent Elastic properties
- No pre-drying needed
- Can be processed on PVC tooling
- Good surface quality, no/low die-drool
- Good melt strength → high throughput rate at customer
- Excellent PP adhesion



Material property comparison

Properties and Units	Test Method	Flexible Seal Compounds from Teknor Apex		
		Monprene® IN-23060	Monprene® IN-23160	Sarlink® 9160
		TPE-S	TPE-S	TPV
Hardness, Shore A	ISO 868	60	60	60
Specific gravity, kg/m ³	ISO 1183	1180	1130	945
Viscosity, Pa.s	ASTM D3835	260	275	295
Compression set (Type A, 22 hr. @ 70 °C), %	ISO 815	38	65	39
Tensile strength, MPa	ISO 37	9.2	7	5.5
Elongation @ break, %	ISO 37	>700	>700	>600
Modulus @ 100% elongation, MPa	ISO 37	1.7	1.8	2.1
Elastic performance	---	++	+	++
Throughput on TPE die	---	++	++	++
Throughput on PVC die	---	+	++	+

Application: Caster Wheels

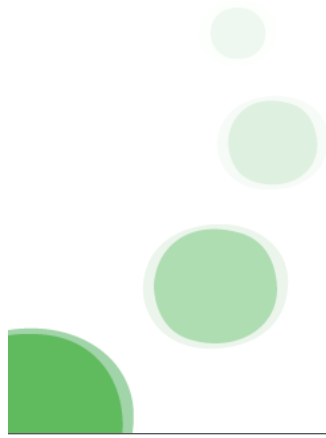
- Material: IN-15065 - General purpose
- Material: MP 3015 - Lower cost
- Material: MP 3001 - Lower cost - lower viscosity

- Wear resistance
- High tear strength
- Resistance to cleaning chemicals
- Easy processing
- Bondability
- Reason to switch
 - Cost savings over Co-polyester, TPU, rubber wheels
 - Recyclability



APPENDIX

- Random applications and typical grades
- Overmoulding grades (*“under construction”*)



Consumer: Sports Fitness / Therapy bands

Therapy bands

Monprene CP-22333

- Film / Sheet extrusion grade
- Excellent process ability
- Easy to color in light colors
- Different thicknesses make for difference in force at elongation
- Alternatives available, such as Monprene CP-22442

Pounds of Force at 100% Elongation



Consumer: Writing utensils

Pen grips

Monprene WR-12058

- Moulding grade
- Excellent process ability
- Easy to color in light colors



Consumer

Ear plugs

Monprene MP-1393D

- Moulding grade
- Excellent process ability
- Easy to color in light colors
- Sweat and sebum oil resistance



Consumer / Wire & Cable

Wire & cable jackets

Telcar TL-8431

- Extrusion grade
- Excellent process ability
- Easy to color in light colors
- Excellent temperature resistance: -60 - +105 degrees



221°F to -94°F



- For Indoor/Outdoor Use
- Ultra Flexible
- Lighted End
- Made in the USA!

12/3 & 14/3 SJEOW
TPE JACKET
125V • 15AMP • 1875 WATTS
LIFETIME WARRANTY

Consumer

Fishing Lures

Monprene CP-32054G

- Moulding grade
- Excellent process ability
- Easy to color in light colors



Consumer:

Window squeegee

Sarlink EE-2260 RED

- Extrusion grade
- Excellent process ability
- Coloured



Consumer

Grip / Anti-sliding parts
on office binders

Monprene MP-2216-1000 NAT

- Moulding grade
- Excellent process ability
- Coloured



Consumer: Personal Care

Razor handle

Telcar TL-2522C

- Moulding grade
- Excellent process ability
- Coloured



Consumer: Personal Care

Soft touch overmolding on lip-balm applicator

Monprene CP-13038 NAT XRD

- Moulding grade
- Excellent process ability
- Easy to color
- Excellent bonding to PP and PE



Consumer: Personal Care

Mouth piece for teeth whitening

Monprene PC-32063G CLR BLU 6119

- Moulding grade
- Excellent process ability
- Coloured in exact color code
- Regulatory compliant
- Clarity



Consumer

Re-useable gear tie

Monprene CP-28133 NAT

- Moulding grade
- Excellent process ability
- Coloured



Industrial

Roof vent collar

Telcar TL-1343A BLK

- Moulding grade
- Excellent process ability
- UV and ozone resistant



Industrial

Caster wheels

Monprene IN-15056 GRY 8028

- Moulding grade
- Excellent process ability
- Easy to color in light colors
- Abrasion resistance
- Non-marking



Monprene®

Food industry

monprene®

Application: Chicken De-feathering

- Material: MP 1500
- High wear resistance
- High tear strength
- Resistance to cleaning chemicals
- Easy processing
- Colorable
- Reason to switch
- Cost savings over Co-polyester



Application	Wheel Treads for Utility Carts
Material	Monprene
Grade	CP-17270



Value Proposition

- Excellent adhesion to Polypropylene
- Outstanding toughness and durability
- Fast set-up and cycle time
- Non-hygroscopic and drying not required
- Light natural color allows for easy colorability
- Recyclable



Monprene[®] | Overmolding Applications

Cordless Optical Mouse Grip Monprene OM-10250

- Soft-touch, matte finish
- Excellent grip, non-slip surface
- Superior chemical resistance
- Ease of processing on 2K vertical molding machine



Property	Typical Value
Hardness, Sh A (5 sec)	50A
Specific Gravity	1.05
Tensile Strength	7.58 Mpa
Elongation	630%

Monprene[®] Overmolding Applications

Application	Safety Mask
Material	Monprene
Grade	RG-18240



Value Proposition

- Soft feel
- Excellent “hot” tear strength
- High lubricant package
- FDA compliant
- Custom colors
- Fast cycle time

Monprene®

Property Modifier



TPE as a PP Modifier

Monprene® TL-TPE-60

- Improves impact resistance
- Improves flexibility
- Used at various loadings for multiple applications

Garden Hose

Monprene®

Safety Products

Earplugs, Safety Masks and Glasses

Application	Ear Plugs, Glasses, Masks
Material	Monprene
Grade	RG-182XX / RG-172XX CP-182XX / RG-172XX Specialist grades - Contact us



- PVC alternative
- Improved comfort, better fit
- Ease of processing on multiple cavity tooling
- Skin oil resistant grades
- UV Stabilised grades