

## THERMOPLASTIC ELASTOMERS

### **FEATURES**

- Bondable to a variety of rigid thermoplastic substrates
- Diverse technologies perform in a wide range of applications
- Designed to process via both insert and multi-shot molding
- Custom formulas and colors can be developed around your specific needs

### **BENEFITS**

- Offers better impact resistance than standard rigid materials alone
- Provides vibration damping
- Delivers better ergonomics and grip performance for hand-held products
- Improves aesthetics

For more information: http://www.rtpcompany.com/ products/elastomer/



RTP Company's specialty TPE 6000 Series expands design freedom by providing an ergonomic grip bonded onto a rigid substrate.

RTP Company's bondable thermoplastic elastomer (TPE) products are designed to bond to rigid substrates and are engineered to perform to your stringent application criteria. With our custom formulated compounds, you will not have to compromise between achieving an excellent overmold bond or maintaining part performance.

Often referred to as "soft-touch," TPE overmolding increases functionality and adds value to many applications. The addition of TPEs has become commonplace across almost all handheld consumer products; delivering better ergonomics, grip performance, aesthetics, vibration dampening, and providing better impact protection than rigid materials alone. Applications literally surround us and span an incredible diversity of function. Everything from your toothbrush handle to your smartphone case use TPEs to differentiate products and provide user benefit. While the applications for overmolded TPEs seem to be limitless, the traditional technologies used in these applications certainly were not. Historically, bondable TPEs were developed as modified versions of existing technology, and the results often compromised material performance. At RTP Company, we have gone a step further to ensure elastomer performance is maintained in these bondable grades. Engineered bondable TPEs, such as Nylabond<sup>TM</sup> delivers superior performance along with nylon bondability, and Polabond<sup>TM</sup> uses innovative bonding technologies to meet your polar substrate bonding needs, while also leveraging the strengths of different base technologies to provide a wide range of in-use performance.

The end result is a product line of standard Bondable TPEs that meet the stringent demands of a broad range of markets: from consumer to automotive, and from medical to industrial. And if a standard product doesn't fit, RTP Company will gladly work with you to develop a custom product that will fit. Unlike most TPE compounders, RTP Company also has extensive experience in formulating rigid and reinforced thermoplastic compounds.

This dual approach allows for coordinated development of both the flexible and rigid components of an application, improving bonding and overall part performance while simplifying your supply chain. For parts requiring unique functionality, RTP Company engineers can further enhance these compounds by incorporating our market-leading array of structural, conductive, wear resistant, flame retardant, or color capabilities.

Nylabond™, Polabond™, and Permaprene™ are trademarks of RTP Company.





# BONDABLE THERMOPLASTIC ELASTOMERS

## THERMOPLASTIC ELASTOMER (TPE) BONDABILITY

The products listed below are offered across a broad hardness and flexibility range. Please contact your local RTP Company representative to inquire about application or to request detailed product data.

		Rigid Substrate Material										
		ABS	PA 6	PA 6/6	PBT	PC	PC/ABS	PBT/PC	PET/PC	PC/ PMMA	PP	RTPU
Bondable TPE	RTP 2700 Series										x	
	RTP 2740 Series										x	
	Permaprene™ 2800 B										x	
	Nylabond™ 6091		x	x								
	Nylabond™ 6092		x	x								
	Polabond™ 6042	×				x	×	x	x	×		Х
	Polabond™ 6041	×				x	×	x	x	×		
	Polabond™ 6003	X			X	X	Х	X	Х	Х		Х

<sup>&</sup>quot;X" indicates combinations exhibiting very good peel strength (15 pli or greater)

### **INNOVATIVE SOLUTIONS**

RTP Company compounds innovative solutions by utilizing the widest array of base Thermoplastic Elastomer technologies in the industry. In addition to being designed to bond to a specific substrate, these technologies are also created with your performance requirements in mind:

- Multiple Bonding Technologies- As an independent thermoplastics compounder, RTP Company is able to offer three completely different Polabond™ product lines to provide you with a range of bonding performance.
- Custom Compounds and Alloys- To meet unique performance needs, RTP Company has the ability to custom formulate bondable TPE materials for improved strength, a specific tactile feel, and more!
- Specialty TPEs- RTP Company is the market leader in functionally modified thermoplastics. This technology translated to Bondable TPEs as well; examples include ATEX compliant static dissipative materials, flame retardant materials, custom colors, and conductive materials.

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### RTP COMPANY: YOUR GLOBAL COMPOUNDER OF CUSTOM ENGINEERED THERMOPLASTICS

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