

Creating Better Solutions Faster

## **TECHNICAL EXPERTISE**

In less than ten years, the Polymax businesses have become recognized as unique, premium providers in the global TPE market due to their technical expertise and innovative spirit. Polymax<sup>TPE</sup> is building upon the technology platform of sister company Nantong Polymax with the development of next-generation materials and processing techniques to support the requirements of North American customers.

Founder Martin Lu has assembled a top-quality R&D team, with doctorate degrees from world-leading research institutions. The team has invested over 50,000 man hours in the creation of a robust materials platform containing more than 500 standard and premium grades of thermoplastic elastomers. The Polymax<sup>TPE</sup> technical sales custom compounding team are particularly skilled in defining the precise specifications and requirements for custom applications, allowing the creation of better solutions faster.



# Packaging Construction Healthcare Electronic Construction Packaging Health Electrical Consumer Products Electronic Automotive

## **PASSION FOR PERFECTION**

Polymax<sup>TPE</sup> specializes in the development of premium thermoplastic elastomer materials for North American manufacturers across a diverse range of industries. The Polymax<sup>TPE</sup> team is unique in their passion for adding value for customers by creating the perfect solution for each project.

In less than 10 years, sister compay Nantong Polymax Elastomer Technology, Co., Ltd has built a profitable, growing business with global reach in the highly competitive thermoplastics industry. Nantong Polymax has become one of the top three TPE manufacturers in China and has been designated the TPE Research and Development Center for Jiangsu Province.

In 2013 the founders of Nantong Polymax expanded their presence in the global TPE market with the opening of a new U.S. based company, Polymax<sup>TPE</sup>, a full-service facility near Chicago, IL designed to provide manufacturing, research and development, technical sales and support for the North American market.



Nantong Polymax, China



PolymaxTPE, USA

# TPE, A BETTER CHOICE

Thermoplastic elastomers (TPE's) are a group of materials that combine the processing advantages of plastics with the elasticity characteristics of rubber. TPE's are characterized by their soft feel and cushioning nature which works well alone or can be bonded to many other harder substrates to improve functionality and design. Industrial designers appreciate TPE's incredible range of aesthetic, sensory and performance characteristics that allow considerable design flexibility. Operations personnel value the easier, faster processing of TPE and its lower environmental impact. Polymax<sup>TPE</sup> is at the forefront of advancements in TPE technology and continues to develop new applications for this versatile material.

### **EXTENSIVE CAPABILITIES**

In addition to research and development expertise, the Polymax<sup>TPE</sup> team has an extensive range of capabilities in materials and manufacturing, and the know-how to leverage these assets for success.

The company develops TPE materials for use in injection molding, extrusion and blow-molding processes. Within the product portfolio there are materials that provide excellent bonding performance to other substrates including PE, PP, ABS, PC/ABS, Co-Polyester, Nylon and Propionate.

Polymax<sup>TPE</sup> grades provide hardness characteristics from 0-99 Shore A and can be formulated to meet a variety of specific physical and aesthetic requirements in flexibility, grip ability, feel, color, opacity, and taste or odor neutrality. The range includes materials which often exceed industry standards in high heat stability, abrasion resistance, tear strength, melt strength and foaming ability as well as low extractable levels required by the food contact and medical industries.

### PRODUCT PERFORMANCE CHARACTERISTIC CHART

Series	Hardness	Extrusion	Injection Molding	Transparent Grade	Bondable Substrate	Applications
P (P3, P2, P1)	8A - 99A	<b>~</b>	<b>V</b>		PP, PE	Overmolding onto PP, or Standing alone Consumer, Industrial, Packaging, Electronics, Healthcare, Automotive
С	OA - 95A	<b>✓</b>	<b>~</b>	<b>~</b>	PP	Clear & ultra soft grades Consumer, Packaging, Electronics, Healthcare
S	30A - 75A		<b>✓</b>		PS, PPO	Overmolding onto Polystyrene Consumer, Electronics
N	50A - 65A		<b>✓</b>		PA 6	Overmolding onto Nylon Consumer, Electronics
F	60A - 97A	<b>✓</b>	•			Flame retardant grades - Halogenated or Halogen-Free Electronics, Wire & Cable, and Industrial
D	30A - 90A	<b>~</b>		•	PP, PE	Extrusion Grades Cap and closure, Films, Window Seals, Wire and Cables
А	10A - 85A		<b>✓</b>	<b>V</b>	ABS, PC PC/ABS, PETG, PBT, TPU	Overmolding onto ABS, ABS/PC, PC Consumer, Industrial, Electronics, Automotive
Coating	40A - 80A	<b>V</b>			PP	Fabric Coating Consumer

For information about high temperature, abrasion resistance, low compression set, and silicone feel grades, please contact us at 847-978-0100.

Polymax<sup>TPE</sup> products are also available under the **maxeLast**® brand, a registered trademark of Polymax Thermoplastic Elastomers, LLC

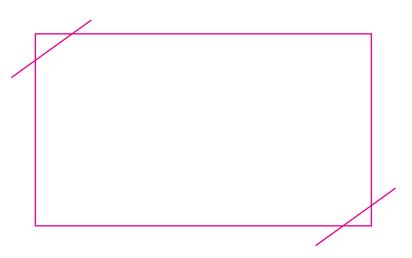


# PREMIUM QUALITY and SERVICE

Polymax<sup>TPE</sup> is recognized by its customers for providing consistent high performance materials that exceed the wide range of rigorous technical and quality requirements in the market segments it serves.

The company has instituted state-of-the-art quality assurance programs and standards to insure peace of mind for its customers. Polymax<sup>TPE</sup> has the operational processes and materials required for compliance with ISO9001:2008, RoHS, FDA, PAHS, UL, and VDE.

Polymax<sup>TPE</sup> has an ingrained customer-centric approach, and often becomes an extension of the customer's in-house technical team. The company has a laser-like focus on the needs of the customer. "If it does not add value for our customers, we don't do it" is the company mantra. Polymax<sup>TPE</sup> has been recognized by major customers as a leading supplier across a wide range of performance metrics including delivery lead time and accuracy, product quality, value and responsiveness. The result is a client list populated with global leading manufacturers and brands.





### **POLYMAX**<sup>TPE</sup>

3210 Oak Grove Avenue Waukegan, IL, USA 60087 Tel: +1- 847-316-9900 Fax: +1-847-881-0316

Email: info@polymaxtpe.com

www.polymaxtpe.com

### **NANTONG POLYMAX**

698 Chantai Road Gangzha District, Nantong, Jiangsu, China 226011

Tel: +86-513-80113200 Fax: +86-513-80113211

Email: sales@polymax.com.cn

www.polymax.com.cn