



ENGINEERED THERMOPLASTIC COMPOUNDS FOR LED LIGHTING APPLICATIONS



*Enabling the next generation of lighting
through innovative plastic compound solutions*

RTP Company

Your Global Compounder of Custom Engineered Thermoplastics

For over 30 years RTP Company has been bringing innovative material solutions to a variety of industries. By combining our in-depth knowledge of plastic technologies with imagination, RTP Company imagineers material solutions ideally matched to end-use requirements.

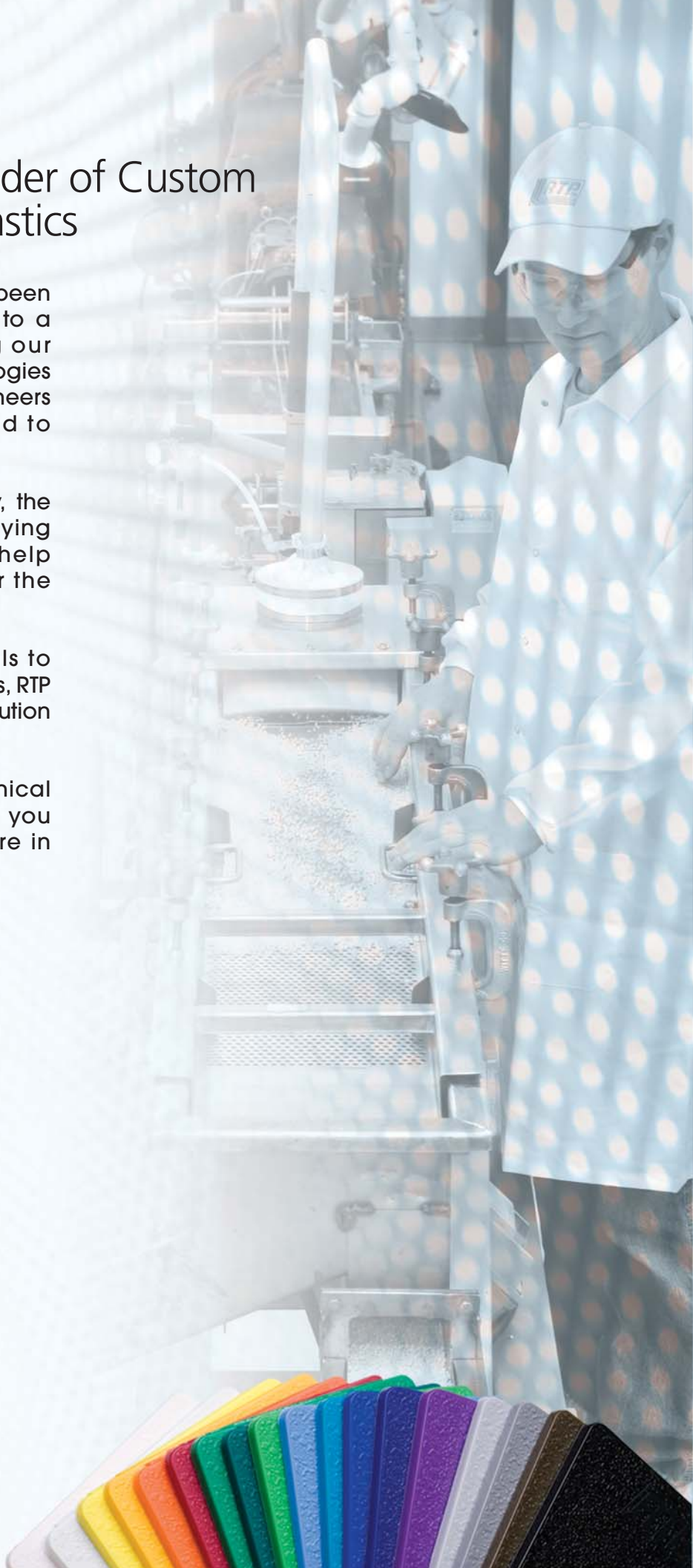
With the rapidly evolving LED industry, the engineers at RTP Company are applying their knowledge and expertise to help develop materials that are ideal for the LED marketplace.

From thermally conductive materials to halogen-free and biobased compounds, RTP Company can help you find the right solution for your LED lighting application.

Our global manufacturing, R&D, technical support, and customer service allow you to implement your solutions anywhere in the world.

From the Start, Partner with RTP Company

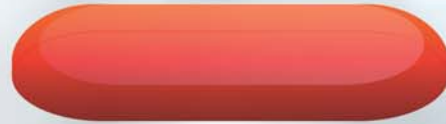
- **Innovative, value-added solutions** not off-the-shelf materials.
- **Engineered thermoplastics** that optimize your design and reduce manufacturing costs.
- **Short lead times** that expedite prototyping and streamline production.
- **Consistent quality** you can rely on globally.
- **Responsive, personalized service** from experienced materials experts.



BIKE LIGHT



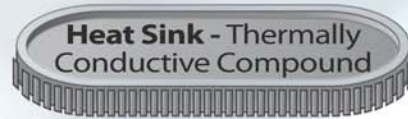
Lens - Light Diffusion
& Colorable Compound



Seal - Thermoplastic
Elastomer Compound



Reflector



Heat Sink - Thermally
Conductive Compound

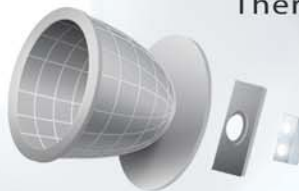


Housing - Biobased or
Recycled Content Compound

WORK LIGHT



Seal -
Thermoplastic
Elastomer Compound



Reflector

Heat Sink -
Thermally Conductive
Compound



Body -
Biobased or Recycled
Content Compound

Grip -
Thermoplastic
Elastomer Compound

APPLICATIONS



AUTOMOTIVE KNOB

Bezel Overmold -
Thermoplastic Elastomer
Compound



**Light Guide
Button Actuator -**
Light Diffusion w/Painted
& Laser Etched Graphic



Bezel



MEDICAL LIGHT

Lens Cover -
Light Diffusion
Compound



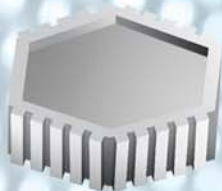
Seal -
Thermoplastic
Elastomer Compound



Reflector



Heat Sink -
Thermally
Conductive
Compound



LED Housing -
Non-Halogenated
Flame Retardant
Compound



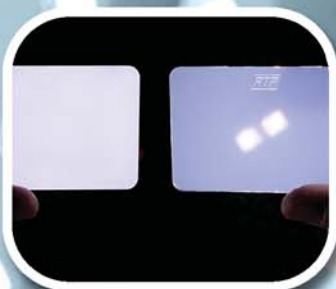
RTP Company offers a variety of solutions for your LED lighting applications. These are initial suggestions and not an exclusive list of RTP Company's product offerings. **We offer custom engineered solutions for your specific application needs.** In addition, color technology including precolor, masterbatch, custom colors, and special effects can be applied.

	NOMENCLATURE	PRODUCT DESCRIPTION	TYPICAL APPLICATIONS	FEATURES/BENEFITS
Thermally Conductive Compounds	RTP 0200 TC-C-30 FR RTP 1300 TC-C-30 RTP 0200 TC-I-25 FR RTP 1300 TC-I-20 RTP 0200 TC-I-10	- Thermally and electrically conductive Nylon - Thermally and electrically conductive PPS - Thermally conductive, electrically isolating Nylon - Thermally conductive, electrically isolating PPS - Thermally conductive, electrically isolating, highly reflective Nylon	Heat sinks in applications such as luminaires, and lighting fixtures	<ul style="list-style-type: none"> • Maximize LED life by reducing risk of costly failures due to extreme temperatures • Reduced weight versus metal • Maximum design flexibility
Light Modification Technologies	RTP 300 Series RTP 1800 Series (These are the most popular options, however most any clear resin can be considered)	- PC - PMMA - Highly reflective - Translucent - High transmission - Attenuation	Signage, backlit panels, buttons or knobs. Extrusion profiles or injection molding	<ul style="list-style-type: none"> • Eliminate hot spots in lenses • Reduce the number of LEDs required resulting in cost savings • Ability to "tune-in" LED light diffusement, including color, contributes to design and visual freedom not previously available with LED technology
RoHS Compliant Flame Retardant Compounds	RTP 204 FR UV RTP 299 X 119106 H RTP 399 X 129971 A RTP 1005 FR A RTP 2500 FR-3010	- V-0, 25% Glass Fiber Reinforced Nylon 6/6 - UL f1 outdoor suitability rating - V-0, 30% glass fiber reinforced Nylon 6/6 - Halogen-Free - V-0, transparent @ 1/6 inch - V-0, 30% Glass Fiber Reinforced PBT - High Flow - V-0, PC/ABS - 5VA rating	Device housings, fixtures, modules, light bars and connectors	<ul style="list-style-type: none"> • Designed specifically to meet the UL flammability ratings demanded by products that incorporate LEDs • A broad range of materials that meet global environmental initiatives such as RoHS and WEEE
Biobased, Natural Fiber and Recycled Content Compounds	RTP 2099X126218A RTP 2099X121249C RTP 2099X126213 RTP 199X124797A RTP 299AX128066C	Impact Biobased PLA Glass Fiber Biobased PLA Biobased PLA PC Alloy Natural Fiber PP Glass Fiber Recycled Nylon	Structural components, housings, bezels, modules and bases in flashlights, work lights, and accent lighting	<ul style="list-style-type: none"> • Empower designers to utilize eco-conscious, biobased, and recycled content materials in their LED devices to produce environmentally friendly, "green" products
Thermoplastic Elastomer Compounds	RTP 6042 Series RTP 2800 B Series RTP 2700 S series RTP 6091 Series RTP 6003 Series RTP 2899 x 128836 A	- PC bondable, CUT to 90-100° C - TPV type, PP bondable - SBC, PP bondable - Nylon bondable - PC bondable, CUT to 110-120° C - Thermally conductive TPEs	Grips, buttons, seals, and housings for portable work lights, flashlights, and consumer electronics	<ul style="list-style-type: none"> • Allow for product differentiation through new product design • Enhanced functionality such as impact protection, seals, and improved ergonomics



**STRUCTURAL • THERMOPLASTIC ELASTOMERS • WEAR
COLOR • CONDUCTIVE • FLAME RETARDANT • FILM/SHEET**

Your Global Compounder of Custom Engineered Thermoplastics



www.rtpcompany.com

Visit our website to view technical information on RTP Company's complete portfolio of thermoplastic compounds for LED lighting applications.

**Color • Conductive
Thermoplastic Elastomer
Flame Retardant • Structural
Wear Resistant**

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

Copyright© 2013 RTP Company, 1/13



RTP Company Corporate Headquarters • 580 East Front Street • Winona, Minnesota 55987 USA
website: www.rtpcompany.com • email: rtp@rtpcompany.com • **Wiman Corporation** • +1 320-259-2554

TELEPHONE:

U.S.A.
+1 507-454-6900

SOUTH AMERICA
+55 11 4193-8772

MEXICO
+52 81 8134-0403

EUROPE
+33 380-253-000

SINGAPORE
+65 6863-6580

CHINA
+86 512-6283-8383

