



Color Solutions for Thermoplastics

Including Masterbatches,
Precolored Materials, and Cube Blends





(case study)

Color Choices

Two of Dremel® Tool's rotary tool categories required different coloring methods: masterbatches and specialty compounds.

Masterbatches

Seasonal MiniMites:

- Economical
- Vibrant
- Quick turn-around
- Consumer appeal

Colored Specialty Compounds

Premium rotary tools:

- Consistent color across product line
- Dazzling, metallic effect
- Professional appearance
- Combines color with high strength
- UL-recognized

"RTP Company made it very easy to walk through the process of choosing the right combination of color pigments to affordably make our tools stand out on the shelf."

– Justin Matuszek, Product Manager
Dremel®/Robert Bosch Tool Corporation

Precise Thermoplastic Color Solutions from RTP Company

Why choose RTP Company for your colored thermoplastics?

- Innovative solutions that optimize your design and cut processing costs
- Responsive, personalized service
- Consistent quality you can rely on, anywhere in the world
- A true global supplier with networked color labs and production facilities

Private ownership enables RTP Company to independently select from over 60 engineering resins and hundreds of additives, modifiers, fillers, reinforcing agents, and colorants. Our experts will assist in developing the best solution to meet your thermoplastic needs.

**Dremel® is a registered trademark of Robert Bosch Tool Corporation*



Your Color – Your Way

At RTP Company, we understand that you not only require the ideal color for your products, but also the best performing coloring method. RTP Company provides a fresh approach to coloring plastics, with fast and accurate color development in your preferred mode:

- Masterbatch
- Precolored resins & compounds
- Cube blends

Utilizing our color experience, our knowledge of engineered polymers, and our state-of-the-art color labs we deliver consistent color to you every time, anywhere around the world.

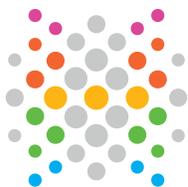
We offer color at your desired level of customization:

- Custom colors
- Standard colors for specific resins
- Universal masterbatches for multiple resins



Need additional assistance?

Hueforia, the Colour Development Team of RTP Company, is available to assist you with color selection. This team of experts provides insight into global color trends and provides guidance on the colorants and additives that make your plastic product look and perform well.



Hueforia

Colour Development Team of RTP Company

Our mission is to enhance the quality, performance and appearance of your plastic products through dedicated service, creative design, innovative technology, and exceptional quality. Your expectations are just the beginning!

RTP Company Color Product Portfolio Solutions

- Masterbatch
- Precolor
- Cube Blends
- Custom
- Standard
- Universal

RTP Company is focused on providing guidance through the color selection process. We can help with unbiased cost analysis to determine which mode of color delivery offers you the best balance of efficiency and economics. After you have the facts, you choose: masterbatch, precolor resin, or cube blend.

Masterbatches are concentrates, and the most common and economical method used by molders. They consist of concentrated pigments dispersed into a polymer carrier resin, which is let-down into the processor's resin of choice at low ratios. We offer a variety of Masterbatch options, including:



**Unicolor® is a registered trademark of RTP Company*

Custom Masterbatch Products

RTP Company has the ability to produce specific colors in all engineering polymers and polyolefins to meet your exact appearance target.

UniColor®

UniColor® universal masterbatches can color multiple polymers, including engineering resins. Featuring extremely low let-down ratios, they are available in a palette of standard colors or as custom products.

Standard Engineering Resins

A spectrum of popular colors speed product development with quick sampling and global availability. They are optimized for injection molding, making the process effortless for our customers. Also included are a robust selection of colored polyolefins for injection molding or extruded applications like conduit, and a series of black and white masterbatch options in PP, PE, and PS.

Additive Masterbatches

Our line of Additive Masterbatches meet unique requirements such as flame retardant, anti-static, laser marking, antimicrobial properties, and more.

Special Effect Masterbatches

Choose from a wide variety of Special Effect Masterbatches to provide your film or sheet products with a completely new look, and broaden their appeal.

Precolored Resins

Precolored resins are often selected by processors for their ease of use. Engineering resins requiring high masterbatch let-down ratios also benefit from precoloring.

RTP Company can precolor all trade name resins to your specification. Our colorists have the knowledge and resources available to guarantee match accuracy and lot-to-lot consistency.

Cube Blends

Cube Blends are ready-to-use color systems that feature a masterbatch that is dry-blended with a natural polymer. Mixing is carefully controlled by RTP Company, eliminating variations in color.

Colored Specialty Compounds

When additional property-enhancing additives or advanced plastic technologies are required along with color, RTP Company has the expertise and experience in polymer and additive sciences that are necessary to ensure success.





Chroma-Shift

Special Effect Compounds

Sometimes a plastic product requires a special coloring effect to catch the consumer eye, add perceived value, blend into natural surroundings, or emphasize a unique product function. Our Special Effect Compounds can increase consumer appeal, provide beneficial features, and add visual impact to your plastic products.

Choose from a wide variety of options, ranging from striking visual effects to functional properties:

Appearance Effects	Functional Effects	Shifting Effects	Material Effects
Metallic	Laser-Markable	Glow-in-the-Dark	Wood Grain
Pearlescent	Laser Welding	Photochromatic	Stone/Granite/Marble
Sparkle Mist	Light Reflective	Thermochromatic	Tortoise Shell
Iridescent	Light Diffusion	Chroma-Shift	Camouflage
Fluorescent	Infrared		Low Gloss
Edge Glow	Security		
Transparent			



Metallic

Camouflage



Laser-Markable

Color Around the World... Local, Personalized Service

Fast, Accurate Global Color Development

Global companies and local processors alike look to RTP Company for fast, accurate global color development. Our global manufacturing facilities are networked using identical means, such as:

- Color-matching equipment
- Formulation and color libraries
- Production procedures
- Raw material supplies

This allows us to quickly and efficiently serve customers around the globe with the same high standards. Our global color development services provide significant advantages such as no rematches and no regulatory issues between global facilities.

Competitive, Responsive

We understand that you are in a race to get products to market. The gap between product development and product launch is rapidly shrinking. You can win this race with color match samples and production quantity orders from RTP Company, delivered in just days.

RTP Global Manufacturing



Combined, our color products and global network capabilities provide you with the most competitive and best performing color solutions worldwide.

Global Color Development

- Rapid response
- Short lead times
- Global color library



Comparison: RTP Company Color Development vs. Traditional Color Development Techniques

RTP Company Color Development	
Benefits	Results
No rematches	Consistent color in 2 to 4 weeks around the globe
No regulatory issues	
Same color results	Accurate every time
No additional testing	

Traditional Color Development	
Issues	Outcome
Large number of rematches	Developing a color standard may take up to three attempts during a 2 to 3 month time frame
Regulatory concerns such as USP, HMF, DIARILIDE, FDA & URL	
Different results	Many iterations
Additional product testing	

(case study)

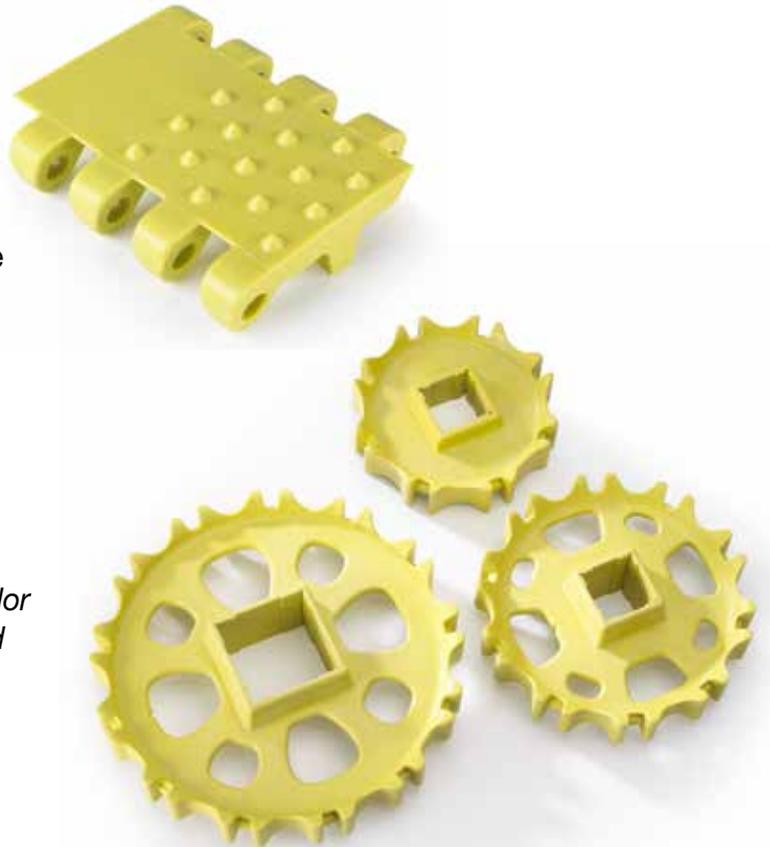
Raising the “Steaks” with Unique Color

Colored Specialty Compounds

Safari Belting Systems, a manufacturer of conveyor systems for meat processing, needed a specialized thermoplastic compound to improve the manufacturer’s quality control. The material requirements were unique: the material needed to withstand high impact, be x-ray detectable, and have FDA-approval. In addition, they selected a bright green color that would stand out from any ground meat, should any belt linkage become damaged during production.

“We selected a bright, fluorescent safety green color that would immediately stand out from any ground meat, and RTP Company matched it precisely.”

– Chris Smith, President – Safari Belting Systems



Imagineering Color Solutions

Color sells! By inspiring, identifying, or creating impact, color can provide incredible benefits to your application. Choosing the right color can mean the difference between your product's success and failure.

You can rely on RTP Company to find an ideal solution for your specific challenge. Countless customers have taken advantage of our color expertise for diverse applications ranging from consumer products that required tremendous shelf appeal, to medical products that demanded specific color technologies.

(case study)

Advanced Color Technology for Medical Solutions

Precolor

The housing on the OmniPod[®] Insulin Management System required just the right level of translucency with an exacting color match to the thermoplastic elastomer (TPE) gasket. RTP Company colored both these materials for this award-winning application.

Custom Medical Color Solutions

- Light diffusion technology
- Exact color match in two distinct polymers
- FDA-compliant ingredients
- Multiple technologies

"We selected an RTP Company TPE for the perimeter seal because we needed an exact color match to the housing so they appear as one part."

– Dave Clare, Project Manager at Insulet



OmniPod[®] is a registered trademark of Insulet Corporation

(case study)

Trendy Colors for Consumer Appeal

Rubbermaid® introduced its new line of fashion-forward, customizable water bottles for style-conscious “tween” girls, called Hip Sips, to make hydration cool. Two dynamic and trendy colors were required for the SportTech and the My Stuff bottle tops. RTP Company answered with vibrant, FDA-compliant translucent colors that were critically colormatched in the United States and then transferred to China.

Color Masterbatch for Polycarbonate

- Translucent
- FDA-compliant
- Color transfer from US to China

Rubbermaid® is a registered trademark of the Newell Rubbermaid company



(case study)

LEDs Light Award Winning Automotive Interiors

Precolored

Popular LED lighting creates a challenge in diffusing these pin-point light sources. Automotive supplier Delphi Electronics & Safety worked with RTP Company engineers and OSRAM Opto Semiconductors to develop a backlighting system for vehicle instrument panels that not only provided even backlighting but also corrected for LED color variations.

Color Corrected LED Light Diffusion

- Soft, even LED light distribution
- Color tinting and correction
- “Most innovative use of plastics”
- SPE Automotive Awards



**Markets That Rely on
RTP Company Color Technologies**

Medical
Construction
Furniture
Consumer Electronics
Building
Industrial
Aerospace
Appliance
Energy
Business Machines
Leisure
Transportation
Automotive
Sports
Food Packaging





Your Global Compounder of Custom Engineered Thermoplastics

RTP COMPANY THERMOPLASTIC TECHNOLOGIES



COLOR

We offer precolored resins, UniColor®, Masterbatches (including Color Conduit), and cube blends for plastic parts ranging from automotive to rocket components and medical devices to toothbrush handles. Our Hueforia color experts provide color selection advice and precise custom color matching services.



CONDUCTIVE

We offer compounds for electrostatic discharge (ESD) protection, thermal management, EMI shielding, or PermaStat® permanent anti-static protection. Available in particulate and all polymeric-based materials, these compounds can be colored as well.



FLAME RETARDANT

Whether you are developing a new product or need to reformulate due to ever-changing regulations, we can custom engineer a flame retardant material with the exact properties you require.



HIGH TEMPERATURE

We formulate our high temperature compounds precisely to retain their performance properties, provide better dimensional stability, and offer excellent electrical characteristics in continuous-use high temperatures.



LONG GLASS FIBER

As pioneers in developing a proprietary pultrusion process, we've perfected the manufacturing of our Long Glass Fiber (LGF) Compounds. These pellets encapsulate long fibers for superior strength, stiffness and impact resistance, making them ideal for metal replacement.



STRUCTURAL

Our reinforced Structural Compounds are formulated to increase strength and stiffness, and provide resistance to impact, creep, and/or fatigue. These materials can be customized to meet cost and performance targets.



TPE

Our thermoplastic elastomers provide rubber-like performance with the processing benefits of thermoplastic resin. Our portfolio ranges from standard, in-stock resins to custom compounds designed to meet your specifications.



TPO

For stiff, lightweight, and impact resistant material, our Thermoplastic Polyolefins are your solution, providing excellent low temperature ductility, as well as UV- and scratch/mar-resistance.



WEAR RESISTANT

Our wear resistant thermoplastic compounds can incorporate internal lubricants to reduce wear and friction, thereby lengthening the service life of your application and reducing your processing costs.



ENGINEERED SHEET

We're your one-stop-shop for thermoplastic sheet. We can offer you a unique material, designed with these technologies and extruded to meet your exact sizing requirements.



FILM – WIMAN

Through our sister company, Wiman Corporation, we can provide you with polymer film in a variety of resins, and customized with additives to provide specific properties.

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