



Special Effect Compounds

Delivering Innovative Solutions Using Thermoplastic Technologies

Your Global Compounder of Custom Engineered Special Effect Thermoplastics

Special Effect Compounds

Special effect compounds can increase consumer appeal, provide beneficial features, and add visual impact to your plastic products... and choosing the right supplier is as important as selecting the right special effect! RTP Company is focused on your thermoplastic application, offering the creativity, consistency, and reliability necessary for your success. Our team of color experts understands the many variables that affect the way color is perceived in plastic applications, and can guide you in selecting the color and special effect technology that creates the impact your application requires.

A Spectrum of Options

Whether you need masterbatches, precolored compounds, or cube blends, we have a solution for you. Our color technologies include special effects that:

- Enhance appearance
- Provide functionality
- Mimic other materials

Within these special effect technologies, there is a wide range of color, resin, and additive options that, when compounded, can create any effect you dare to dream! RTP Company experts are ready to provide the right solution for your application. And when it's ready, we can manufacture it to your specifications, consistently, at any of our global locations.

Anytime, Anywhere

With manufacturing facilities located around the globe, you can rely on RTP Company to deliver consistent special effect thermoplastic compounds, anywhere in the world, with short lead times.



Water Bottle Lids

Solution: Custom transparent colors

Decking Material

Solution: Wood grain special effect color





Bicycle Helmet

Solution: Chroma-Shift, with optimized material and molding to reduce weld lines

Your Color - Your Way

Custom color effects from RTP Company are available in your preferred mode:

- Precolored compounds
- Masterbatches
- Cube blends

Whatever custom color you envision, RTP Company can bring it to life in the mode that works best for your application.



Deck Birdbath

Solution: Granite effect, with glass fiber structural reinforcement and UV stabilizers

Special Effect Categories

Compounds featuring special effects generally fall into the following categories:

- Appearance effects
- Shifting effects
- Functional effects
- Material effects
- Multi-technology compounds

From striking visual effects to functional compounds, RTP Company offers solutions that provide light control, UV protection, flame retardant, structural, conductive, elastomeric, and/or wear and friction resistant properties.



Hand Tools

Solution: Metallic effect, with high strength and UL recognition



Conveyor Belt Gears

Solution: Fluorescent color, with x-ray detectable additive



Appearance Effects

Metallic

Adding metallic shine and shimmer will give your plastic applications the look of polished steel or brushed aluminum. With these metallic effects, you will achieve a professional, polished appearance.



Pearlescent

The radiance and luster of pearls are captured in an iridescent effect from light interacting with multiple surfaces. This effect is best achieved in resins that have high refractive indexes.



Sparkle Mist

Glass encapsulated pearlescent particles add a dramatic sparkle effect to applications. Glimmer effects require a smooth surface finish and a transparent resin.



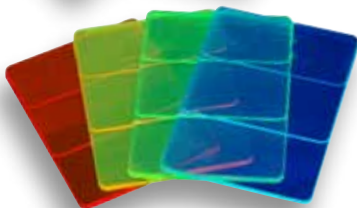
Iridescent

Richness and an illusion of depth are projected by the shades of soft, yet intense color visible at varying angles from these otherwise milky-appearing compounds.



Fluorescent

Brightly colored pigments and dyes yield intense eye-catching colors that demand attention.



Edge Glow

Edge Glow describes the effect of light-collecting fluorescent colorants in clear or “near clear” polymers that produce a bright light emission on the edges of molded parts. Several color options are available, with yellow-orange-red shades being the most popular.



Transparent

Tinting transparent resins with dyes creates an appearance change that transforms the tone of transmitted light for functional purposes and allows easy identification of parts.

Functional Effects

Laser-Markable

Laser light reacts with plastics to create crisp, permanent, abrasion-resistant marking. Special formulations create different colors, increasing contrast between the marking and the base material.

Laser Welding

A combination of colorants allow laser-welding of different polymers in black, colored and transparent applications.

Light Reflective

Highly reflective particles suspended in transparent resins offer the unique characteristic of reflecting light and intensifying the surface appearance, while light still passes through the material.

Light Diffusion

Special light diffusing technology creates a smooth translucent or frosted look that is excellent for hiding internal components while still allowing significant light to be transmitted. Works best with LED lighting.

Infrared

Infrared thermoplastic compounds are tuned to be transparent or opaque to specific long wavelengths.

Security

Microscopic color-coded wafers and unique chemicals can be engineered into thermoplastic compounds. This technology can be used to trace the origins of your product.



Shifting Effects

Glow-in-the-Dark (GITD)

Phosphorescent pigments absorb light and slowly emit it over time, producing the familiar glow-in-the-dark effect. Zinc sulfide-based products are the most economical, but have limited phosphorescence performance. Strontium oxide aluminate-based products have the highest performance, with both brighter and longer lasting glow, often exceeding 10 times the performance of zinc sulfide-based pigments.

Photochromatic

Exposure to the UV rays in sunlight initiate a color change in these compounds, from light translucent colors to deep blue, red, or green tones. This effect is limited to low modulus resins.

Thermochromatic

Change in temperature causes a change in hue for these compounds. Formulations can be keyed to specific temperature ranges. Hot or cold are possible. This effect is limited to low modulus resins.

Chroma-Shift

Chroma-Shift involves a combination of traditional colorants and highly reflective colorants or additives which are used to produce a dramatic color range dependent on viewing angle. This effect simulates the shimmering color found in many of nature's wonders, such as seashells, reptiles, fish, insects, or precious stones such as opal.



Multi-Technology Compounds

If your thermoplastic application requires more than just color, you have come to the right place! RTP Company offers solutions that provide any combination of light control, UV protection, flame retardant, structural, conductive, elastomeric, and/or wear and friction resistant properties to meet even the most demanding application requirements.



Material Effects

Wood Grain

Selected pigments and special molding techniques are combined to produce characteristics akin to broad patterns seen in natural wood grains.

Stone/Granite/Marble

Create the look and feel of natural stones and granite-like surfaces. Proprietary formulations can be adapted for various desired effects.

Tortoise Shell

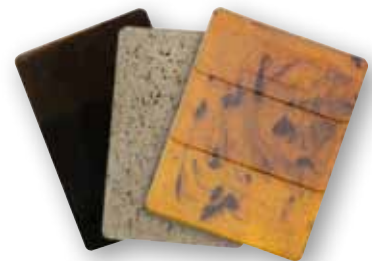
This variegated effect simulates tortoise shell in familiar tones of amber, gold, and brown. The effect of these shades swirling and combining evoke the time-honored appearance without the environmental impact to sea life.

Camouflage

Until now, the only way to recreate an authentic military or hunters' camouflage was to use a printed fabric. RTP Company has now recreated the desired camouflage effect that can be injection or blow molded in plastics.

Low Gloss

By lowering the gloss of certain bright and shiny plastics, RTP Company's technology can increase the perceived value of your part.



HUEFORIA: The Colour Development Team of RTP Company

If you are in need of color guidance, we have an entire team of design experts to provide you with insight into the global color trends, colorants, and additives that make your product look and perform well.

For more information, visit www.hueforia.com, or contact your local RTP Company sales representative.



RTP Company is a proud member of the Color Marketing Group



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

Your Global Compounder of Custom Engineered Thermoplastics

RTP COMPANY is committed to providing you with solutions, customization, and service for all of your thermoplastic needs. We offer a wide range of technologies available in pellet, sheet, and film that are designed to meet even your most challenging application requirements.

COLOR

Color inspires, energizes, and builds brand recognition, and choosing the right supplier is as important as selecting the right color. We offer color technology options in standard precolored resins or custom compounds, UniColor™ Masterbatches, or cube blends.

CONDUCTIVE

We offer compounds for electrostatic discharge (ESD) protection, 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.

STRUCTURAL

Our reinforced structural compounds can increase strength, stiffness, and provide resistance to impact, creep, and fatigue. Ideal for metal or other material replacement, our formulas can be customized to meet cost and performance targets.

TPE

Our thermoplastic elastomers provide rubber-like performance with the processing benefits of thermoplastic resin. We offer a wide range of options, from standard, in-stock resins to custom compounds designed to meet your specifications.

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.

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 2016 RTP Company, 11/16

Please contact your local RTP Company Sales Engineer by calling **1-507-454-6900**
1-800-433-4787 (U.S. only), E-mail rtp@rtpcompany.com or visit www.rtpcompany.com



RTP Company Corporate Headquarters • 580 East Front Street • Winona, Minnesota 55987 USA website: www.rtpcompany.com • email: rtp@rtpcompany.com

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	Wiman Corporation +1 320-259-2554	ESP™ +1 800-432-2386
------------	---------------------------	-----------------------------------	----------------------------	---------------------------	----------------------------	----------------------------	--------------------------------------	-------------------------

