

Masterbatches



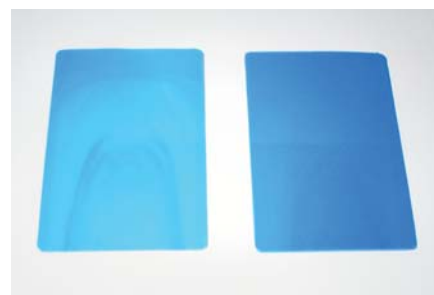
Exactly your chemistry.

Exacting Science, Exceptional Results
Specialty Compounds for Demanding Applications

Uncommon Solutions To Uncompromising Challenges

Formulating and compounding high-performance engineering resins is a Clariant specialty. Our arsenal of innovative polymer modification technologies is utilized worldwide to make products stronger, more attractive, and better able to withstand the rigors of harsh weather and rough use. Advanced manufacturing capabilities, benchmark quality assurance and unmatched technical and support resources are all part of the Clariant mix.

We have in-depth knowledge of a comprehensive range of engineering grade thermoplastics, from nylon, polycarbonate, ABS and PBT to polyethersulfone, PPA and even PEEK. By combining these materials in optimal proportions with optimal additives such as high-performance carbon and glass fibers, Teflon[®], stainless steel, antistats, flame retardants, minerals or silicones, we create effective solutions to the most demanding product performance challenges.



Clariant engineers fine-tune compounds based on your precise performance criteria. The plaque on the left, a standard unfilled impact-modified Nylon 66 with OMNIColor blue, shows poor dispersion of pigment; the plaque on the right, Clariant's improved impact-modified specialty compounded Nylon 6 with OMNIColor blue, shows consistent color distribution.

The Process

Clariant assesses your precise application requirements, drawing on our advanced compounding technology and broad experience to evolve the ideal solution.

We begin by searching our vast database of existing formulations for one that may work for you “as is” or with minor modifications. This often provides a quick and economical option.

When no appropriate formulation is available, we start from scratch. The first step is to evaluate all the thermoplastic resins that fit your processing capabilities, including any that may still be in development at one of our suppliers. After determining the best base resin, we analyze and select fillers, reinforcements, colorants and other additive components to produce the desired results.

Clariant’s global presence and reputation for excellence are important ingredients in every compound we deliver. With no material bias, we have the autonomy to choose whichever components are best for your application, regardless of manufacturer. Our worldwide supplier relationships give our customers a competitive edge over the competition.

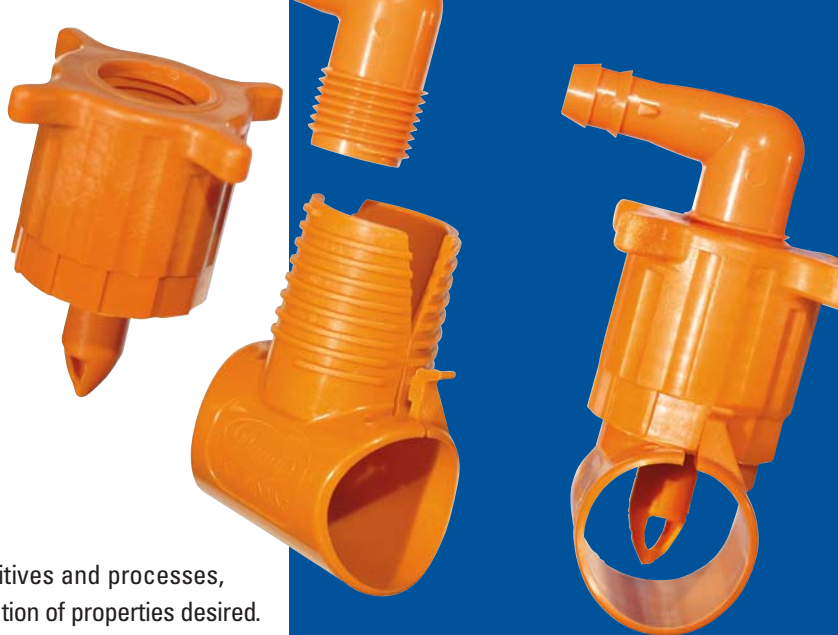
Technical leadership, stringent quality safeguards, advanced manufacturing capabilities and the ability to respond quickly anywhere on the planet are major advantages for Clariant customers, large and small.



Compounding is done in several steps. Quality controlled resin(s) and additive(s) are fed through an extruder, where they are combined using melt blending processing methods. The melted compound exits the extruder in strands, which are cooled and cut into pellets. After the finished products satisfy Clariant’s stringent quality performance tests, the material is packaged in the appropriate form for the customer and shipped accordingly.



The Opportunities



Working with this full palette of standard resins, alloys, additives and processes, Clariant compounding experts can create virtually any combination of properties desired.

BASE POLYMERS

Polypropylene (PP)	Polycarbonate/ABS Alloy (PC/ABS)
Nylon 6 (PA6)	High Density Polyethylene (HDPE)
Nylon 6/6 (PA6/6)	Low Density Polyethylene (LDPE)
Nylon 6/10 (PA6/10)	Polyethylene Terephthalate (PET)
Nylon 11 (PA11)	Polybutylene Terephthalate (PBT)
Nylon 6/12 (PA6/12)	Polytrimethylene Terephthalate (PTT)
Amorphous Nylon	Rigid Thermoplastic Polyurethane (RTPU)
High Temperature Nylon (HTN)	Thermoplastic Polyimide (TPI)
Nylon 12 (PA12)	Modified Polyphenylene Oxide (PPO)
Impact Modified Nylons	Polysulfone (PSU)
Acetal (POM)	Polysulfone/Polycarbonate Alloy (PSU/PC)
Polystyrene (PS)	Polyethersulfone (PES)
Acrylic (PMMA)	Polyphenylene Sulfide (PPS)
Polycarbonate/Acrylic Alloy (PC/PMMA)	Liquid Crystal Polymer (LCP)
Acrylonitrile Butadiene Styrene (ABS)	Polyetherimide (PEI)
Polycarbonate (PC)	Polyetheretherketone (PEEK)

Dawn Industries' innovative Kwik-Tap irrigation system uses a high percentage of regrind, which can cause its distinctive orange color to darken. Clariant solved this problem by developing a heat-stable, pre-colored, glass-filled Nylon 66 compound. By also compounding in a silicone lubricant package, the customer benefited with improved processing consistency.

PROCESSES

Injection Molding
Multilayer Blow Molding
Extrusion
Film Extrusion
Blow Molding
Injection Blow Molding

Please call for other resins not listed here.



A Partner in Innovation

A global color technology leader, Clariant offers the industry's broadest range of high-performance masterbatches for plastics, including REMAFIN® masterbatches for polyolefins; RENOL® masterbatches for engineering resins, styrenics and PVC; CESA® additive masterbatches; HYDROCEROL® chemical foaming and nucleating agents; OMNIColor® universal color masterbatches; and ENIGMA™ special effects. These products are widely specified in the packaging, automotive, durable goods, housewares, office automation, electrical, and other major industries.

Clariant's in-depth market knowledge, formulation expertise and customer commitment are recognized worldwide. A global network of ISO 9000 facilities incorporates the most demanding

manufacturing standards to ensure the quality and consistency of Clariant masterbatches wherever they are used.

Clariant also continues to drive new dimensions in color creativity. At its global ColorWorks™ design and technology centers, inspiration and technology meld together, helping customers strengthen brand recognition, enhance new product development and accelerate speed to market.

Additional information about Clariant products and technical support is available from all our global facilities. Start a dialog with the experts at the Clariant location nearest you.



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